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THE
NUMISMATIC CHRONICLE,
AND
JOURNAL OF THE NUMISMATIC SOCIETY.





THE
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AND
JOURNAL
OF THE
NUMISMATIC SOCIETY.

EDITED BY

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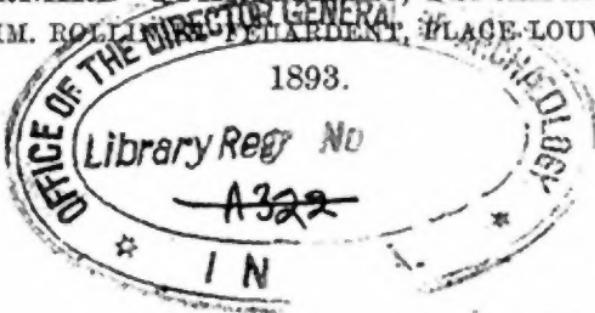
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NUMISMATIC CHRONICLE.

I.

GREEK COINS ACQUIRED BY THE BRITISH MUSEUM IN 1892.

(See Plate I.)

DURING the year 1892 (Jan.—Dec.) the Department of Coins and Medals in the British Museum has acquired 457 coins of the Greek class, 10 of which are gold and electrum, 99 silver, and 348 bronze. These coins have been acquired mainly by purchase, but some are gifts due to the kindness of Major-General M. G. Clerk, Mr. W. Loring,¹ Mr. H. Montagu, F.S.A., Dr. Hermann Weber, and Mr. F. Weekes.

A description of noteworthy specimens among these acquisitions is given in the following pages.²

DICAEA (MACEDONIA).

1. *Obv.*—Cock r.; bebind, disc containing a star (the sun?); in front, volute; border of dots.

Rev.—Octopus within shallow incuse square.

R. Size .7. Weight 86·4 grains. [Pl. I. 1.]

¹ Two bronze coins of Megalopolis, in Arcadia, and one AE of Parium.

² Important Greek acquisitions of the Department of Coins and Medals during the years 1887, 1888, 1889, 1890, and 1891

A variety of the rare coin in the Six collection, published in Imhoof-Blumer's *Monnaies grecques*, p. 72, No. 49, Pl. C, 14. The reverse closely resembles that of the coins of Eretria issued from *circ. B.C. 480—445*.³

MENDE (MACEDONIA).

2. *Obr.*—Ass standing r. ; border of dots.

Rev.—Crow r. ; incuse square.

A.R. Size .45. Weight 10·4 grains. [Pl. I. 2.]

3. *Obr.*—Fore-part of ass r. ; border of dots.

Rev.—[M] E N Kantharos ; incuse square.

A.R. Size .3. Weight 8·8 grains. [Pl. I. 3.]

4. *Obr.*—Head of ass l. ; border of dots.

Rev.—Kantharos ; incuse square.

A.R. Size .2. Weight 2·1 grains. [Pl. I. 4.]

Thirteen coins of Mende were described in the *Brit. Mus. Cat., Macedonia* (1879). The collection now consists of 28 specimens. Six coins acquired by the Museum in 1891 were described in the *Num. Chron.* for 1892, p. 6, and several others have been purchased since. Nos. 2, 3, 4, now described, belong to the period B.C. 450—424 of the coinage. The types, as on other coins of Mende, relate to Dionysos and Silenos. No. 3 is the

will be found described by me in the *Num. Chron.* for 1888, pp. 1—21; 1889, pp. 249—267; 1890, pp. 311—329; cf. 1891, p. 116; 1891, pp. 117—134; 1892, pp. 1—21. In preparing the present paper, I have had the advantage of consulting the section on "Remarkable Coins," written by Mr. Barclay Head for the Report on the British Museum annually presented to the House of Commons.

³ Head, *Cat. Central Greece*, p. 121.



same as No. 7 of the *Brit. Mus. Cat.*, "Mende," with the important exception of the inscription.⁴

ALEXANDER THE GREAT (MACEDON).

5. *Olv.*—Head of young Herakles r., in lion's skin; border of dots.

Rev.—ΑΛΕΞΑΝ ΔΡΟΥ Eagle l. (on thunderbolt?): in field r., ear of corn.

AR. Size .5. Weight 32.2 grains. [Pl. I. 5.]

A rare half-drachm of Alexander's first coinage.⁵

DEMETRIUS POLIORCETES (KING OF MACEDON, B.C. 306—289).

6. *Olv.*—Head of Demetrius r., wearing diadem and bull's horn.

Rev.—
BAΞΙΑΕΩ[Ξ] Rider, wearing petasos,
[Δ]HMHTPIoY chlamys, and chiton, and
holding spear in rest with r. hand, galloping r.
on horse; beneath horse, >E.

N. Size .75. Weight 131 grains. [Pl. I. 6.]

A good specimen of the rare stater of Demetrius. Other staters are in the French,⁶ Berlin,⁷ and Hirsch⁸ collections, and one in the British Museum is published in Head's *Guide to the Coins of the Ancients*, IV. B, 15; Pl. XXXI. 15.

⁴ For other coins of Mende see Imhoof-Blumer, *Monnaies grecques*, p. 82 f.; Von Sallet's *Beschreibung*, ii., p. 99 f. (seven specimens); Head, *Hist. Num.*, p. 187; *Num. Chron.*, 1890, p. 2.

⁵ With the symbol compare Imhoof-Blumer, *Monn. gr.*, p. 118, No. 22.

⁶ Mionnet, *Planches*, Pl. LXX. 8.

⁷ Friedländer and Von Sallet, *Das Königliche Münzkabinett*, No. 884.

⁸ *Annuaire de la Soc. num. franç.*, 1884, p. 41, Pl. I. 16.

ABDERA (THRACE).

7. *Obv.*—ΑΒΔΗ (in small letters beneath the type). Griffin, with pointed wing, rearing l.

Rev.—ΗΡΑ ΓΟΡΗ ξ Head of young Hermes r. in petasos; whole in incuse square.

R. Size .9. Weight 190·3 grains. [Pl. I. 7.]

An unpublished tetradrachm of Aeginetic weight struck at Abdera during the period B.C. 430—408. A head of Hermes occurs on a silver coin of Abdera, described in Von Sallet's *Beschreibung*, i. p. 107, No. 72; Pl. IV. 39 (cf. *Brit. Mus. Cat., Taur. Chers.*, p. 71, No. 41); and a figure of Hermes is the type of other coins of this city. The name ΗΡΑΓΟΡΑΣ is found on coins of Rhodes.⁹

THASOS.

8. *Obv.*—Head of young Dionysos r., wearing band across forehead, and ivy-wreath.

Rev.—ΘΑΣΙΩΝ Herakles, naked, standing l.; in r., club; lion's skin over left arm.

R. Size .75. Weight 63·8 grains. [Pl. I. 8.]

A fine specimen of the rare drachm of the last issue of Thasian money,¹⁰ struck after B.C. 146.¹¹ The tetradrachms of this issue are abundant, and are usually of coarse work. Our drachm resembles the better-executed tetradrachms, such as, for instance, the coin photographed in the *Beschreibung*, i., Pl. VII. 67. The head of Dionysos on the drachms bears a remarkable, but, perhaps, fortuitous, resemblance to the head of that divinity

⁹ Mion., *Sup.* vi., 590.

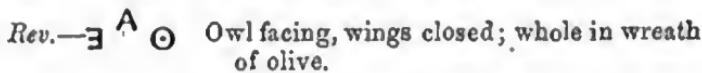
¹⁰ Cf. the specimens in the Berlin Museum (Von Sallet, *Beschreibung* i., p. 294, Nos. 108, 109).

¹¹ Cf. Head, *Hist. Num.*, p. 229.

on bronze coins of Amisus¹² struck in the time of Mithradates Eupator (B.C. 121—63).

ATHENS.

9. *Obv.*—Head of Athena r., wearing close-fitting crested helmet adorned with olive-leaves.

Rev.— Owl facing, wings closed; whole in wreath of olive.

A. Size .4. Weight 38.3 grains. [Pl. I. 9.]

A quarter stater of Athens. The British Museum possesses three specimens of the stater, but until now had no examples of the smaller denominations, which, however, are well represented in the cabinets of Berlin¹³ and Paris. The French quarter-stater (Babelon, "Les monnaies d'or d'Athènes," in *Revue des études grecques*, 1889, p. 135) is a variety of that now published.

According to Mr. Head (*Cat. Attica*, p. xxviii.) the issue of this series of gold coins took place about B.C. 393, under the administration of Conon. Dr. J. P. Six and M. Babelon, in his able paper just referred to, show good reasons for assigning the issue to the year B.C. 407, when the Athenians made extraordinary efforts to increase their fleet, and even melted down into coin the gold images of Nike in the Parthenon.

ARGINA.

10. *Obv.*—Two dolphins in opposite directions.

Rev.—Incuse square divided by bands into five compartments.

A. Size .5. Weight 29.5 grains. [Pl. I. 12.]

¹² Wroth, *Cat. Pontus*, Pl. III., Nos. 8, 9.

¹³ Z. f. N. v., p. 3.

This unpublished diobol appears, to judge from the style of the reverse, to have been struck shortly before B.C. 431, the year in which the inhabitants of Ægina were expelled by the Athenians. The dolphins must be regarded as symbols either of Apollo or of Poseidon. It is difficult to suggest a reason for the substitution of this new type for the familiar tortoise. Already, however, as early as B.C. 480, the dolphin had for a short time been employed as the reverse type of a few Æginetan obols which bore on the obverse the tortoise.¹⁴ When, in B.C. 404, the Æginetans were restored to their former homes by Lysander, they again employed the tortoise and incuse devices on their silver coinage, but in one division of the incuse placed the symbol of the dolphin.¹⁵ On the bronze coins, issued after B.C. 404, the dolphins appear as the only type.¹⁶

PHENEUS (ARCADIA).

11. *Obv.*—Bust of Hermes r., wearing chlamys; petasos suspended from neck.

Rev.—ΦΕ Ram r.; above, caduceus r.

AR. Size .45. Weight 9.1 grains. [Pl. I. 10.]

A poor example of this pleasing coin (struck *circ.* B.C. 400—370) is described in the *Brit. Mus. Cat.* (*Pelop.*, p. 193, No. 5). The excellent preservation of the new specimen entitles it to a place in our Plates.

¹⁴ Head, *Cat. Attica, &c.*, p. 187, Nos. 144, 145.

¹⁵ Head, *op. cit.*, Pl. XXV. 9—7.

¹⁶ Head, *op. cit.*, Pl. XXV. 11—14. Mr. Head supposes that while Ægina was in possession of the Athenian kleruchs, B.C. 431—404, no coins were minted in Ægina.

CNOSSUS (CRETE).

(See *infra*, under RHODES, No. 18.)

CERASUS (PONTUS).

12. *Obr.*—AVTKMAV CEOVΑΛΕΞΑΝΔΡΟC. Bust of Severus Alexander r., laur., wearing paludamentum and cuirass.

Rev.—KEPACOV NTIWN; in ex..(€)TPΞB (year 162), Herakles standing facing; in r., club; in l., lion's skin (rude style).

Æ. Size 1·15.

The coins of Cerasus are dated from an era beginning in A.D. 64 (Imhoof, *Griech. Münzen.*, p. 559). 162, the date on this specimen, corresponds, therefore, to A.D. 226. The reverse type is a rude copy of a coin of Cerasus struck under Elagabalus (*Brit. Mus. Cat., Pontus*, p. 26; Pl. V. 2).

SINOPE (PAPHLAGONIA).

18. *Obr.*—Head of Sinope l.; hair in sphendone; wearing necklace and earring with triple pendant; before head, aplustre; border of dots.

Rev.—**γιαγιγο** Sea-eagle l. on dolphin.

R. Size ·8. Weight 84 grains. [Pl. I. 14.]

14. Another specimen, similar, but with inscription incomplete.

R. Size ·7. Weight 76·7 grains.

The name of the Satrap on drachms of this class—hitherto of great rarity—has been variously read. By M. Waddington and M. Six, *Abdemon* (?); by M. Th. Reinach, *Abdammu*, or *Abdammon*; by M. Babelon (*Rev. Num.* 1892, p. 175), *Abrocomu* (the “*Abrocomas*” of Xenophon and Isocrates). The well-preserved specimen,

No. 13, now acquired for the British Museum, shows clearly the letters given above, letters already well explained by Mr. Head, writing in the *Num. Chron.* for 1892, p. 253, as those of the name *Abdsasan*. Our photograph will interest those who have already read Mr. Head's note on the coin.

CYZICUS (MYSIA).

15. *Obv.*—Owl, wings closed, standing r. on tunny; on each side of owl, a star.

Rev.—Incuse square of mill-sail pattern, dotted.

El. Size 4. Weight 41.2 grains. [Pl. I. 13.]

A unique hecte, belonging to the last period of the electrum coinage of Cyzicus, *circ.* B.C. 400—350, as is shown by the dotted incuse square, and by the resemblance of the obverse type to the owl on coins of Athens struck between B.C. 430 (or later) and B.C. 322. (Head, *Cat. Attica*, Pl. V, VI.)

The owl is not found on any other Cyzicene coin. Apparently it was suggested as a type by the Athenian coins, though it is difficult to explain the addition of the stars. Possibly they are only intended as ornaments, and were meant to fill the space that was occupied on the Athenian coins by the olive-branch and crescent behind the owl and by the inscription in front of it. The crescent may have suggested the star.¹⁷

¹⁷ The types of a lead *tessera* in the Margaritis collection may be compared with this coin:

Obv.—Helmeted head of Athena r.; behind, star.

Rev.—Two-handled vase between two owls; above the head of each owl is a star. (*Rev. Num.*, 1886, p. 28, No. 85, Pl. IV. 8.)

LAMPSACUS (MYSIA).

16. *Ov.*—Young male head l., with stag's horn (Actaeon).
Rev.—Fore-part of winged horse r. within incuse square, of which only slight traces are visible.
N. Size .7. Weight 130·5 grains. [Pl. I. 16.]

An excellent example of this scarce stater, which is also represented in the collections of Mr. Greenwell and Mr. Loebbecke.¹⁸ A young head of Actaeon occurs on electrum coins of Cyzicus (Greenwell, *Cyzicus*, No. 24, Pl. I. 25, 26; Babylon in *Rev. Num.* 1892, p. 108, Pl. IV. 3), but is of decidedly earlier style. A figure of a young Actaeon, attacked by his hounds, is seen on a red-figured vase (date, *circ. B.C.* 400), reproduced in *Monumenti*, xi. Pl. XLII. The treatment is much less pleasing than on the coin. Actaeon has animal's ears and two horns standing upright on his head. The fine head on our coin presents several affinities in treatment with the head of a female satyr with pointed ear, represented on another Lampsacene stater (Wroth, *Brit. Mus. Cat., Mysia*, p. 80, No. 24, Pl. XIX. 2), a head which (as I have already remarked, *op. cit.* p. xxvii.) has something of the feeling that inspired the famous youthful satyr of Praxiteles.¹⁹ A comparison of the coins suggests the supposition that the two heads were engraved by the same artist.

¹⁸ In my *Cat. Mysia*, p. xxiii., No. 17, and p. xxvi., I suggested that the stater described by Dr. J. P. Six in *Num. Chron.*, 1888, p. 111, No. 20, as bearing the head of Alexander the Great, might possibly be a stater of the Actaeon type. Dr. Six has since kindly informed me that his No. 20 is a distinct coin from my No. 17 with the head of Actaeon.

¹⁹ Baumeister, *Denkmäler*, art. "Praxiteles," Fig. 1,548.

PERGAMUM (MYSIA).

17. *Obv.*—Cista mystica with half-open lid, from which a serpent issues l.; the whole in wreath of ivy.

Rev.— between the heads of two coiled serpents; between serpents, bow-case, ornamented with aplustro, containing a strung bow; in field, r., staff (or thyrsos?) entwined by serpent; in field l., .

R. Size 1. Weight 176 grains.

This unpublished cistophorus exactly resembles (except in the symbol on the reverse) a cistophorus of Ephesus, struck in B.C. 50—49, at the time when "the province of Asia was left without a proconsul in consequence of the breaking out of the civil wars between Cæsar and Pompeius. During this year L. Antonius remained as quaestor in Asia, and by his authority were issued, in all likelihood, the anonymous cistophori, only signed with the letter Q for Quaestor, and with the monogram  (Head, *Ephesus*, p. 73). The symbol of the cistophorus struck at Ephesus is a long torch: on the Pergamene coin is a snake-encircled staff, or thyrsos, a symbol that appears on the earlier cistophori of Pergamum.²⁰

RHODES.

18. *Obv.*—Head of Herakles r. in lion's skin; countermarked with a rude representation of a square labyrinth.

Rev.— ΑΛΕΞΑΝΔΡΟΥ. Zeus Aetophoros seated l.; beneath seat, ; in field l., rose, beneath which, PO.

R. Size 1·1. Weight 267 grains.

²⁰ Wroth, *Cat. Mysia*, p. 123, No. 94 ff.

An Alexandrine tetradrachm of the Rhodian mint, forming a variety of those described by Müller (*Num. d'Alex.*, Nos. 1154—1167). Müller's coins are of his Class VI. (after *circ. B.C.* 200), but this specimen is of earlier style, and appears to belong to Class V., *B.C.* 250—200. The chief interest of our specimen lies, however, in its having been utilised for currency in Crete. The London coin-dealer from whom the British Museum obtained it was informed that it was found in Crete; and, apart from this information, we should have no hesitation in connecting it with that island, on account of its bearing, as a countermark, the labyrinth, the well-known type of the Cretan city of Cnossus.²¹ Before this tetradrachm came to light, there was already some evidence that Rhodian coins were in use in Crete, as one specimen of a Cnossian coin, assigned by me to the period *B.C.* 350—220 (*Cat. Crete*, p. 21, No. 30, Pl. V. 16) is restruck on a drachm of Rhodes.²²

PHARNABAZUS, SATRAP OF DASCYLIUM.

19. *Obv.*—ΦΑΡ[Ν]ΑΒΑ. Bearded male head (Pharnabazus) r., wearing Persian head-dress, two flaps of which are tied over his chin.

Rev.—Prow l.; the upper deck adorned with griffin l.; on either side, dolphin downwards; beneath, tunny l.; circular incuse.

R. Size 1. Weight 226.5 grains. [Pl. I. 11.]

A variety of this coin, in poor condition, has been for some years in the British Museum,²³ but the admirable

²¹ For other Alexandrine coins supposed by Müller to bear the mint-marks of Cretan cities, see *Num. d'Alex.*, p. 227 f.

²² Svoronos, *Num. de la Crete*, p. 88, No. 175.

²³ Head, *Brit. Mus. Cat., Ionia*, p. 325, No. 12; Pl. XXXI. 5.

preservation of this new specimen renders it a most valuable acquisition. Another well-known example of the coin is in the French collection (De Luynes, *Num. des Satrap.*, p. 4; Pl. I. 5). Another specimen, in the Berlin Museum, photographed in Imhoof-Blumer's *Porträtköpfe*, Pl. III. No. 2, presents an interesting portrait which seems, however, somewhat wanting in strength (*Das Königliche Münzkabinett*, No. 813).

That the portrait is that of Pharnabazus himself, and not, as some writers have maintained, an idealised effigy of the King of Persia, may now be regarded as certain, especially since the publication of M. Babelon's valuable monograph on Satrapal coinage.²⁴ It seems clear also²⁵ that the issuing of money by Pharnabazus and other satraps was not a privilege inherent in their ordinary governmental functions, but an exceptional and occasional incident of their position as military commanders.

Dr. J. P. Six has suggested²⁶ that the stater of Pharnabazus now under consideration was issued by Conon in B.C. 395 for the payment of his fleet, which was blockaded in the port of Caunus in Caria, by Pharax, in 396 and was delivered in 395 by Pharnabazus, who came to Conon's aid and supplied him with money.²⁷ The head of Pharnabazus, according to this theory, merely appears, therefore, as a mark of Conon's gratitude. On the other hand, the tunny on the reverse of the coins, suggests that the mint-place was Cyzicus, and M. Babelon has well pointed out²⁸ an occasion when the coins could have been struck at that

²⁴ *Kerue Num.* for 1892, p. 461.

²⁵ Babelon, *op. cit.*, p. 282.

²⁶ *Num. Chron.*, 1890, p. 256; cf. Head, *Cat. Ionia.*, p. lvi.

²⁷ Head, *op. cit.* p. lvi.

²⁸ Babelon, *op. cit.*, pp. 442—444.

city. About B.C. 410, Pharnabazus, in conjunction with the Spartan admiral, Mindarus, re-conquered Cyzicus from the Athenians, and Xenophon expressly states (*Hellen.*, i. 24—26), that, after the capture of the city, Pharnabazus distributed considerable sums of money to the officers of the fleet, and gave two months' pay to the men.

BRIULA (LYDIA).

20. *Obr.*—**AVKTIAIAIIOC ANTΩNEINOC.** Head of Antoninus Pius r., bare.

Rer.—**BPIOY ΛΕΙΤΩΝ.** Dionysos, wearing himation over lower limbs, standing l., resting l. arm on column; in his r., kantharos; in his l., thyrsos; before him, panther.

Æ. Size .95.

Zeus, Kybele, and Helios occur on other coins of Briula. Dionysos is found on a coin of M. Aurelius in the British Museum (cf. Mion., *Sup.* vii., p. 331, No. 79).

CILBIANI SUPERIORES (LYDIA).

21. *Obv.*—**ΔΟΜΙΤΙΑCE BACTH.** Bust of Domitia r.

Rer.—**KΙΛΒΙΑΝΩΝ ΤΩΝ ΑΝΩ.** Statue of Artemis of Ephesus.²⁹

Æ. Size .85.

The statue of the Ephesian Artemis appears on other coins of the Kilbiani, who, as Dr. Imhoof-Blumer has remarked, belonged to the *conventus* of Ephesus.³⁰

DALDIS (LYDIA).

22. *Obr.*—**AVKAITAIAIIOC ANTΩNEINOC.** Head of Antoninus Pius r., laur.

²⁹ With the type cf. Imhoof in *Num. Zeit.*, 1888, p. 7, No. 3.

³⁰ Cf. Ramsay, *Hist. Geog.*, p. 118.

Rer.—ΔΑΛΔΙ ΑΝΩΝ. Dionysos, wearing himation over lower limbs, standing l., resting l. arm on column; in his r. hand, kantharos; in his l., thyrsos; before him, panther.

Æ. Size 1.

The types of obverse and reverse closely resemble those of the coin of Briula described above, No. 20.

AMORIUM (ΠΑΡΥΟΙΑ).

23. *Obv.*—AVT. K. M. AVP. ΚΕΟV (H)·ΑΝΤΩΝΙ
ΝΟCAV. Bust of Caracalla r., laur.

Rer.—ΑΜΟΠΙΑ ΝΩΝ. Herakles, naked, standing r. before tree (of the Hesperides); in r., club; in l., apple; lion's skin on l. arm.

Æ. Size 1.85.

Herakles is represented on other coins of Amorium already published (e.g. Imhoof, *Mon. gr.* p. 393, No. 58. Caracalla; cf. Mion. "Amorium").

ATTUDA (ΦΡΥΓΙΑ).

24. *Obv.*—ΑVKAIΛCE ΤΤCEVΗPOCTTE AVKAI
ΑΝΤΩΝΕΙ NOCΛCETTΓET ACKAI.
Bust of Sept. Severus r.; behind it, bust of Caracalla r.; bust of Geta l. facing bust of Severus.

Rer.—ΕTTIMEPO [V]ΦΟV ΤΤΟΛV (Δ?) ΑΝ-
ΤΩΝΙ AT TOVΔΕ ΩΝ. Tetrastyle temple, within which Kybele, wearing chiton with diplois, veil and modius, standing facing; her hands placed on the heads of two lions standing one on each side of her.³¹

Æ. Size 1.65.

(Presented by Mr. H. Montagu, F.S.A.)

³¹ With the type, which is usual at Attuda, cf. Waddington, *Asie mineure*, p. 14; Pl. II. 1; Mion. iv., p. 243, No. 295. An ἐπιφελητής occurs at Eucarpia, in Phrygia, and elsewhere in the province of Asia. (Cf. Wroth, *Cat. Myśia*, p. 92, note.)

LYCIA.

The following rare Lycian coins were unknown at the time of the publication of Dr. J. P. Six's learned monograph "Monnaies Lyciennes" (*Rev. Num.* 1886). I arrange them under the headings proposed by Dr. Six.

PERLIS.

(Lycian Dynast, *circ. B.C. 480.*)

25. *Obv.*—Two dolphins swimming r. and l. ; beneath, boar's head.

Rev.—**Π Ρ Λ.** Triskelis ; border of dots ; whole in incuse square.

R. Size .45. Weight 17.4 grains. [Pl. I. 15.]

The types of this trihemi-obol are the same as those of the stater of "Perlis" in the British Museum and Waddington collections (Six, *op. cit.*, p. 160, 112, 112 *bis.*, Pl. X. 5).

SPINTAZA.

(Dynast of Telmissos, *circ. B.C. 410—405.*)²²

26. *Obv.*—Female head l. ; hair bound with cord and tied in bunch behind.

Rev.—**Σ Π Π Ξ Τ Ρ Ι Ρ.** Tetraskelis : border of dots ; whole in incuse square.

R. Size .8. Weight 153.9 grains. [Pl. I. 17.]

A stater of this type was previously unknown. Two coins of a smaller denomination, bearing a female head, are published by Fellows. One of these (Fellows, Pl. I. 7), in the British Museum, is badly represented in Fellows's engraving, and the archaic character of the head is

²² Six, *op. cit.* p. 162.

not made clear. The type of the head on our stater and of the head on the smaller coins seems to be that of the period B.C. 480—470, and, unless it can be maintained that the treatment is not really archaic, but only an intentional imitation of the archaic style, it will be impossible to assign these coins to a ruler who lived so late as B.C. 410—405.

TETHHIVEIBIS.

(Lycian Dynast, *circ. B.C. 405—395.*)

27. *Obv.*—Female head l.; hair bound with cord and tied in bunch behind.²³

Rev.—T \uparrow XXEF \uparrow EBE. Tetraskelis; border of dots; whole in incuse square.

A.R. Size .8. Weight 151.6 grains.

(Presented by Dr. Hermann Weber.)

The head on this rare stater is of the same archaic character as that on the stater of "Spintaza," just described. There is the same difficulty therefore in assigning the coin to the date B.C. 405—395.

ZOMUS (?).

(*Circ. B.C. 394—390.*)

28. *Obv.*—Lion's scalp; beneath, T P B.

Rev.—I  M. Triskelis; circular incuse.

A.R. Size 1. Weight 149.8 grains.

This coin differs from the specimens published by Dr.

²³ The obverse of this specimen is worn, but I have compared it with the impression of a similar coin of "Tethhiveibis" in a foreign dealer's possession. With both specimens, compare the coin formerly in the Ivanoff collection described by Six, *op. cit.* p. 164, No. 180.

Six (*op. cit.* p. 423, No. 247; Pl. X. 14) in having an inscription on the obverse.

LYSTRA (LYCAONIA).

29. *Obv.* — **IMPE AVGVS TI.** Head of Augustus l., laur.; behind, cornucopiae.

Rev. — **COLIVLFEI (sic) GEM** Colonist guiding plough
[L]VSTRA drawn l. by two humped
 oxen; in his l. hand staff (or vexillum?).

Æ. Size 1.

30. *Obv.* — **FAVSTINA AVG.** Bust of Faustina, jun., r.

Rev. — **COLIVL LVSTRA.** Tyche of Lystra, wearing
 turreted head-dress, veil, and peplos, seated,
 facing, on rock upon which her l. hand rests; in
 her r. hand ears of corn; beneath her feet,
 river-god swimming.

Æ. Size 8.

The money of Lystra is rare and until last year did not exist in the British Museum. Coins of Lystra were first published in 1883, when M. Waddington described a coin of Augustus, similar to our No. 29, from the specimen in his own collection.³⁴ In his *Monnaies grecques* (1883) Dr. Imhoof-Blumer also described (p. 347) coins of Trajan (?) and M. Aurelius. By means of these coins it was first ascertained that Lystra was a Roman *colonia*.³⁵

The site of Lystra, which had long remained uncertain, has now been fixed at Khatyn Serai through the discovery by Prof. Sterrett,³⁶ of Roman inscriptions, of which the

³⁴ *Rev. Num.*, 1883, pp. 57, 58. Mr. Loebbecke has a specimen of the coin (*Z. f. N.*, vol. xvii., p. 14, No. 1).

³⁵ It was one of the military colonies of Augustus, probably founded in B.C. 6. (Ramsay, *Hist. Geog.*, p. 398.)

³⁶ *Papers of American School of Class. Studies at Athens*, vol. iii., "Wolfe Expedition," p. 142 f.; cf. Ramsay, *Hist. Geog.*, p. 332.

following³⁷ illustrates the legend on the coins, especially our No. 29:—**DIVVM·AVG(ustum) COL(oni) IVL(ia) FELIX GEMINA LVSTRA CONSECRAVIT D(e)creto D(ecurionum).**

No. 30 was procured in Southern Asia Minor by Prof. W. M. Ramsay and Mr. Hogarth. A specimen is also in the Loebbecke collection.³⁸ A similar reverse type occurs at the Lycaonian town of Barata.³⁹

From the very interesting incident related in the *Acts of the Apostles* (chap. xiv.), we learn that the people of Lystra were worshippers of "Zeus"; and the Apostles Barnabas and Paul were, according to the writer of the Acts, identified by the Lycaonians as Zeus (*Δία*) and Hermes (*Ἐρμῆν*). The commentators have usually assumed that the divinities in question are Greek gods. It seems to me, however, more likely that in this *colonia* the Roman gods Jupiter and Mercurius are intended. Paul was called "Hermes" because he was "the chief speaker," like the Mercurius of Horace, *Od. I. x. 1*, "Mercuri facunde nepos Atlantis." According to Ovid, Jupiter and Mercurius in the guise of mortals, visited Phrygia and the dwelling-place of Baucis and Philemon, in company:

"Jupiter huc, specie mortali, cumque parente
Venit Atlantiades positis caducifer alis.
Mille domos adiere, locum requiemque petentes:
Mille domos clauscre serae: tamen una recepit
Parva quidem, stipulis et canna tecta palustri."

Ov. Met. viii. 626.

³⁷ Sterrett, *op. cit.* p. 142, No. 242.

³⁸ *Z. f. N.*, vol. xvii., p. 14, No. 2, Pl. II. 4.

³⁹ Waddington, *Rer. Num.*, 1883, p. 42, No. 6. A specimen of the coin has been acquired for the British Museum during 1892.

SAVATRA (LYCAONIA).

31. *Obr.*—**AVT · KAI · AΔP. ANTΩNINOC.** Bust of Antoninus Pius. r., laur., wearing paludamentum and cuirass.

Rev.—**CAOVA TPEΩN.** Athena, wearing peplos and helmet, standing l., extending r. hand over thy-miaterion placed before her; in her l. hand, spear; behind her, shield.

Æ. Size .8.

This coin, which is one of the specimens collected by Ramsay and Hogarth in Asia Minor (see under "Lystra"), was unknown at the time of the publication of M. Waddington's list of the coins of Savatra (*Rev. Num.* 1883, p. 61). A figure of Athena occurs, however, on other coins of the place (*Rev. Num. ib.* Nos. 2 and 6).

TAVIUM (GALATIA).

32. *Obr.*—**IOVΛIA CEBACTH.** Bust of Julia Domna r.

Rev.—**ΣΕ · TPO TA OVIANΩN.** Hygieia on l., and Asklepios on r., standing facing one another; between them, Telesphoros.⁴⁰

Æ. Size 1.1.

TYANA (CAPPADOCIA).

Imperial. (Time of Trajan ?)

33. *Obr.*—Turreted female head r. (the Tyche of the City).

Rev.—**TVAN EΩN.** Perseus standing l.; in l., harpa; r. hand outstretched.⁴¹

Æ. Size .65. Thick fabric.

⁴⁰ On Coins of Tavium, see Head, *Hist. Num.* p. 681; on the site Nofez Kewi, Ramsay, *Hist. Geog. of Asia Minor*, p. 248; and Sterrett, *Papers of American School at Athens*, vol. ii. p. 310, "Wolfe Expedition."

⁴¹ Cf. a similar coin in Mion. *Sup.*, vol. vii. p. 712, No. 311, wrongly described.

ARADUS (PHOENICIA).

84. *Obv.*—Head of Tyche of Aradus r., veiled and turreted; border of dots.

Rev.—ΑΡΑΔΙΩΝ. Nike standing l., holding in r. aplustre, in l. palm-branch; in field l., ΣΤΤΡ (year 186 = B.C. 73), ♀ and ΜΣ; whole in wreath of laurel.

AR. Size 1·05. Wt. 229·9 grains.

85. Similar; in field l. of reverse ΓΡΡ (year 198 = B.C. 66), Λ and ΜΣ.

AR. Size 1·1. Wt. 280·8 grains.

86. Similar; in field l. of reverse ΔΡΡ (year 194 = B.C. 65), Φ and ΑΣ.

AR. Size 1·05. Wt. 228·7 grains.

These coins belong to the abundant issue of dated tetradrachms that took place at Aradus between the years B.C. 136 and B.C. 46,⁴² at a time when the city enjoyed much commercial prosperity. Nos. 34 and 36 have come to light since the publication of M. Babelon's elaborate monograph on the numismatics of Aradus (*Rev. Num.* 1891, pp. 414—416), and bear dates that do not occur in his list. No. 35 is a variety of the coins published by Babelon.

WARWICK WROTH.

⁴² Head, *Hist. Num.*, p. 667. These coins are dated from the era of Aradus, which begins in B.C. 259.

II.

SOME RARE OR UNPUBLISHED GREEK COINS.

I HAVE recently had the privilege of examining a considerable number of Greek coins obtained by Mr. Loring, Fellow of King's College, Cambridge, in his travels in Arcadia during the last three years. Most of them were found and brought to him by peasants. The collection consists for the most part of well-known types of the Peloponnese;¹ there are also a few coins from Central and Northern Greece, and from places as far distant from Arcadia as Rhodes, Cos, and Cydonia in Crete.

The following pieces, from their rarity or interest, seem to merit publication.

PARIUM.

1. *Obr.*—IMP. CAE. M.AV. COMM. AVG. Head and bust of Commodus, laur. r.

Rev.—DEO . CVPIDINI . COL . GEM . IVL . HAD . PA. Eros winged, standing facing on base, head

¹ The following places and leagues of the Peloponnese are represented: Sicyon, the Arcadians (i. Archaic class; ii. League coins, 370—363 B.C.; iii. "League coins" struck by Megalopolitans, 363—280 B.C., with one Antinous coin), the Achæan League—these three classes are very abundantly exemplified—Patræ, Phlius, Elis, Messene, Thuria, Lacedæmon, Argos, Epidaurus, Cleitor, Heraea, Mantinea, Megalopolis, Paroreia, Pheneus, Tegea, and Thelpusa.

turned to l., l. hand resting on side, r. hand extended holding flower (?), term on r. side on same base.

Æ. 10.

An extremely rare copy of the Eros of Praxiteles. There are seven other copies of the Eros known on coins. They are represented together in an article by Prof. Gardner on a statuette of Eros in the *Journal of Hellenic Studies*, of 1883, where he discusses the question of their nearness to the work of Praxiteles. Our specimen is apparently identical with the one at Copenhagen, but differs slightly from all the others. The type is not in the British Museum

MEGALOPOLIS.

2. *Obr.*—AVT. K. Λ. CETT. CEBHPOC. Bust of Severus r.

Rev.—ΜΕΓΑΛΟΤΤΟΛΙΤΩΝ. Wreath, within which ΛVK [ΕΑ or ΑΙΑ].

Æ. 9.

3. A similar piece to the above in very bad condition. The inscription ΛVKEA is, however, quite distinct.

Æ. 9.

This type is unpublished. M. Svoronos informs me that a coin of similar type is in the collection of the University at Athens. The cast which he has sent me shows that it is not from the same die as our coins, and bears the inscription ΛVKAIA and not ΛVKEA. A piece is cited in Gardner and Imh. of-Blumer, *Numismatic Commentary on Pausanias*, p. 105, under Lycosura, with the inscription ΛVKAIA, which is stated to be at Athens. M. Svoronos, however, tells me that no such piece is at present in either of the collections at Athens.

The Lycean games celebrated on these coins are mentioned by Pausanias (viii. 2, 1), who ascribes their establishment, with the foundation of Lycosura, to Lycaon. He states that they were older than the Panathenæa at Athens and as old as the Olympian games. In another passage (Paus. viii. 38, 4), he makes the following statement: “ἔστι δὲ ἐν τῷ Λυκαίῳ Πανός τε ιερὸν, καὶ περὶ αὐτὸν ἀλσος δένδρων καὶ ιππόδρομός τε, καὶ πρὸ αὐτοῦ στάδιον · τὸ δὲ ἀρχαῖον τῶν Λυκαίων ἱγον τὸν ἀγῶνα ἐνταῦθα.” It would thus seem probable that the games had been discontinued in Pausanias' time, but were renewed in the time of Sept. Severus, if not before. I am informed by Mr. Loring that the remains of the hippodrome and stadium still exist, and are situated near the summit of what is now called Dhiaphórti, the highest peak of Lykaion. They are distant about four hours from Megalopolis and about two hours from Lycosura.

PAGÆ (?).

4. *Obr.*—Inscription obscure. **COMM.** . . Head of *Commodus* (?), laur. r.

Rer.—Inscription obliterated. Gate with three arches, passage through higher central arch; figure on base in each of the smaller side arches. Three figures on the summit of the whole building.

Æ. 1·0.

So far as I can discover this coin is unpublished. It is not in the British Museum. I have ventured to ascribe it to Pagæ, where we find on two coins (see Imhoof-Blumer and Gardner, *Num. Comm. on Paus.* Pl. A, v. vi.) representations of a building bearing a strong general resemblance to that on our coin. One of them (*l. c.*, A, v.) only differs from our representation in respect of the figures in the side-arches, which are placed on a floor in the upper

part of the arches and not on bases on the ground. This building is not mentioned by Pausanias and is not identified.

DELPHI.

5. *Obv.* — ΘΕΑ . ΦΑΥ . . . Bust of Faustina, sen., r.

Rev. — ΔΕΛΦΩΝ. Temple with Ionic columns, front and one side visible. Within temple nude statue of Apollo facing, l. elbow resting on column. Doubtful object (acroterion) beyond pediment on the right.

Æ. 1.95.

This copy of the famous temple of Apollo at Delphi differs from all previously known copies (see *Num. Comm. on Paus.* pp. 119, 120). It, however, nearly resembles that on two specimens in the British Museum (*Num. Comm. on Paus.*, Pl. X. xxiv., xxv. ; and *B. M. Cat., Central Greece*, Pl. IV. 22), from which it only differs in the representation of the stylobate, in the absence of the Θ or ● (the omphalos) from the pediment, and the presence of an acroterion.

CORINTH.

6. *Obv.* — IMP. CAES. DOMIT. AVG. GER. Head of Domitian r.

Rev. — COL. AVG. COR. Single arch; on the top, quadriga (?).

Æ. 1.05.

This seems to be a very rare coin. It is not in the British Museum, but is similar to a specimen at Munich published by Imhoof-Blumer and Gardner (*Num. Comm. on Paus.* p. 22, Pl. F, xcvi.). They identify it with the Propylaea at Corinth, which Pausanias (II. 3, 2) says had upon it, ἄρματα ἐπίχρυσα, τὸ μὲν Φαέθοντα Ἡλίου παῖδα, τὸ δὲ Ἡλίου αὐτὸν φέρον. The other two copies of this building extant have the one a quadriga and the other a

biga (*Num. Comm. on Paus.*, Pl. F, xcixii., xcix.). Our coin is very dissimilar in detail to these two coins, and the objects on the top bear but a distant resemblance to horses. Still Pausanias mentions no arch with which it can be identified, and knowing the extreme licence which coin artists allowed themselves in copying buildings we must probably conclude that it is a sketchy copy of the Propylaea. It seems possible, however, that it may be some triumphal arch at Corinth of which we have no record.

LARISSA CREMASTE.

7. *Obr.*—Head of nymph r.; hair rolled.

Rev.—ΛΑΡΙΣΑ (obscure). Harpa within wreath.

Æ. ·5.

This specimen differs from the one in the British Museum (*B. M. Cat., Thessaly*, Pl. VI. 15) in having the head of the nymph to the right instead of to the left.

PAROREIA.

8. *Obr.*—Head of Zeus r. with long hair and pointed beard.

Rev.—ΠΑΡ (retrogr.) Large Π.

AR. ·4.

A specimen of this rare coin is in the British Museum (*B. M. Cat., Peloponnesus*, xxxv. 22). It has been attributed to the Parrhasii by Imhoof-Blumer (*Mon. Gr.*, p. 204).

F. BRAYNE BAKER.

III.

ON A FIND OF COINS AT FISCHENICH, NEAR COLOGNE,

WITH OBSERVATIONS ON FLEMISH IMITATIONS OF
ENGLISH NOBLES.

(See Plates II. and III.)

IN the beginning of the summer of 1890 a hoard of coins was discovered by the workmen employed in excavating the foundations for a new church at Fischenich, near Cologne. This hoard consisted principally of gold ducats and silver pieces of Albert and Isabella, but it included, amongst other rarities, an early gold coin of Rostock, the 1624 dollar of Hanau, near Frankfort, and a very rare gold gulden of Brandenburg. Many of the pieces were taken possession of by the workmen, and some of these were disposed of to dealers, who, in certain cases, were subsequently compelled to deliver them up to the authorities. The hoard included at least one hundred and twenty-four gold and twenty silver coins, and was, in all probability, deposited during the Thirty Years' War. The Berlin Cabinet had the privilege of choosing what it required from the number of coins which had reached the hands of the authorities, but this option was exercised to the extent, I believe, of not more than four or five pieces. Among those which had been previously disposed of were several gold nobles, at least eight in number,



1

2

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4



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bearing the type of, and affecting to have been struck by, Henry VI of England. These, having regard to the apparent date of the deposit (which was, at all events, not anterior to 1624), bore, naturally, a somewhat worn appearance.

It is with reference to these nobles that, I think, the above short account of the hitherto undescribed Fischenich find will be interesting to English readers; and the few observations which I propose to add on the subject of these coins lead, by a natural sequence of ideas, to the consideration of another series of gold nobles well known to our English collectors.

The eight nobles from the find shortly afterwards came into my hands, and embrace five distinct varieties, four of which are depicted on Plate II. attached to this paper. These five varieties may be described, in their order, as follows:—

1. *Obr.*—Usual type, with two ropes to the left and one to the right; an annulet under the King's sword-arm. *Leg.* H̄ERRIC A DI GR̄AT' A REX A ΑΝΩΓΛ' < ' FRAN' A DRS A hY.

Rev.—Usual type; mint-mark lys; an annulet outside one of the spandrels of the tressure. *Leg.* I hE A ΑΝΤV' A TRΑΝΣΙΑΝS° PER° ΜΕΔΙΒΡ° ILLOR' A IBAT. Weight, 108½ grs. (Pl. II. No. 1).

2. *Obr.*—Same type and legends on both sides as the last, but the word DI, in the obverse legend, is followed by a trefoil, and the reverse legend reads ILLORV' A IBAT, and after I hE are three pellets in pyramidal form instead of a rosette. Weight, 102 grains (Pl. II. No. 2). Another example identical in type and legends weighed 103½ grains.

3. Same type and legends, but on the obverse is a pyramid of three pellets after each word in the legends except hY, and in the reverse legend, reading

ILLOR o IBAN, the words are separated by annulets as in the case of No. 1, and the same form of small rosette occurs after IBAN. Weight, 102½ grains (Pl. II. No. 3). Two other examples occurred of somewhat similar weights.

4. *Obv.*—Similar to No. 1, but without the annulet under the king's sword-arm.

Rev.—Similar to No. 2. Weight, 102 grains. [Pl. II. No. 4.]

5. The example of the fifth variety was in the finest state of preservation, and similar to the noble (Lot 160) in the sale of the Rev. E. J. Shepherd's coins, the obverse being apparently from the same die, but the reverse legend reads IBAN instead of IBTT, and the letter in the centre of the reverse more nearly resembles Ω than h, and the workmanship generally is coarser than that on Mr. Shepherd's coin. Weight, 102½ grains.

In order to elucidate the remarks which I propose to make on the subject of these pieces, I have, in the Plate appended hereto (Pl. II. No. 5), included an illustration of Mr. Shepherd's coin, which was purchased by me at the sale of his collection in 1885. In the catalogue it is described as being of coarse work, weighing 104 grains, and as having been considered by its late owner to be unique. It will be observed that there is a small lis under the king's wrist on the obverse, and that no annulet occurs outside the spandril on the reverse.

I include further (Pl. II. No. 6) an illustration of a somewhat similar piece of the weight of 103½ grains, which differs in bearing the mint-mark cross patée on the reverse, but has also the small lis under the king's wrist on the obverse. The h in the centre of the reverse is not distinguishable from Ω and is upside down. This also is in my cabinet.

It will be noticed at once that, with reference to all these pieces, the normal weight of the noble of Henry VI, viz., 108 grains, is invariably departed from, and this fact is of essential importance to the arguments intended to be adduced by me on the subject of the series. A further important point involved is the very rough and inartistic workmanship of the designs, and of the form of the letters, and even of the varied punctuation. In addition to this, it will be remembered that on all the pieces above described, the usual $I\ddot{h}C$ (for $I\ddot{h}ESVS$) is spelt $I\ddot{h}C$.

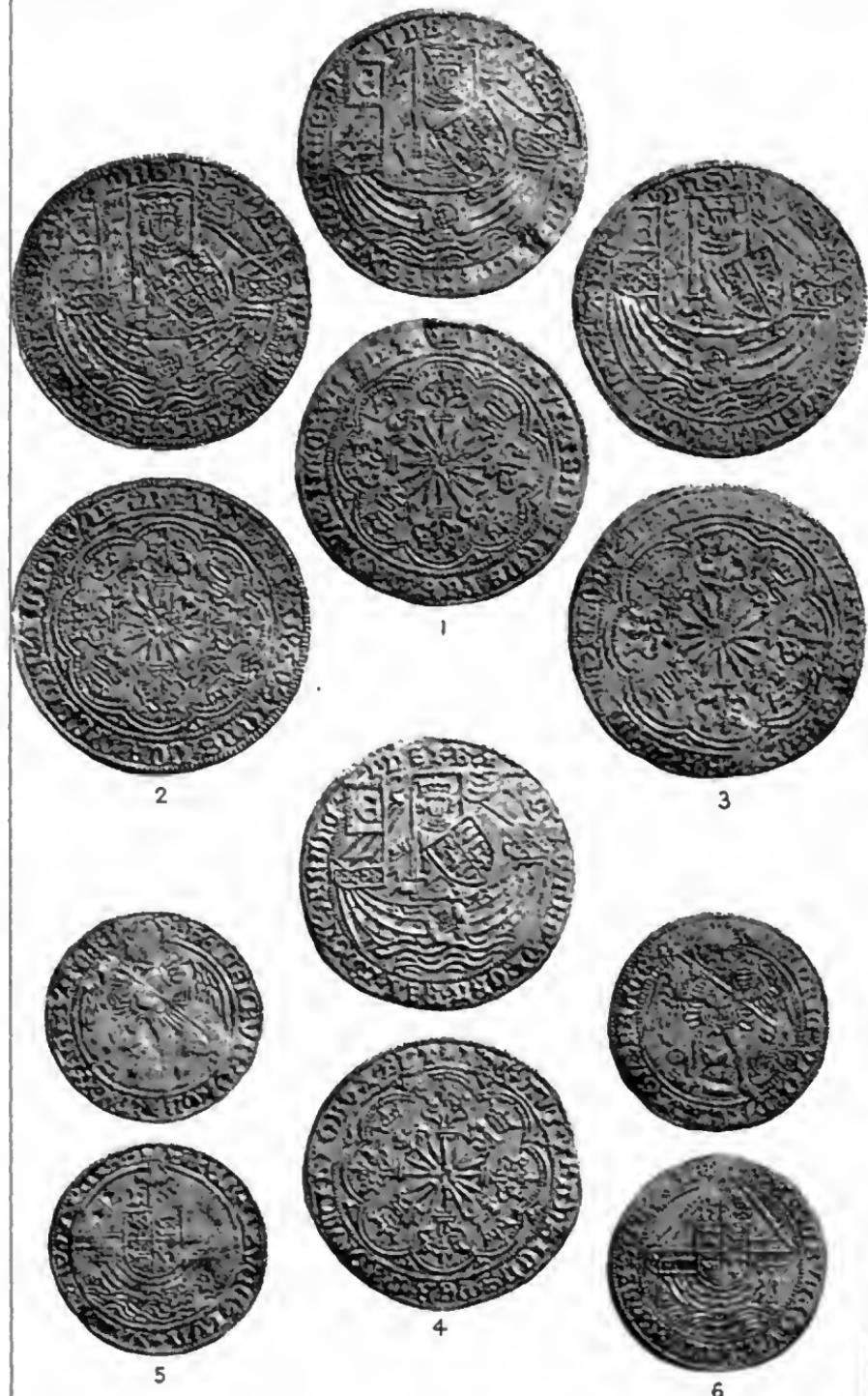
I have little doubt that the whole of these coins form part of a series struck, probably in the Low Countries, in imitation of the English noble. The workmanship has a Flemish appearance; the reason for the lightness of weight would, if my theory be accepted, be sufficiently apparent, and the only doubt that would remain is whether they were so struck by authority or not.

In view of Henry's rule over substantial slices of French territory, and the extensive connection, in the earlier part of his reign, between that country and this, it might be suggested that these coins may have been struck, by the king's authority, in France or in Burgundy, or, perhaps, in Aujou; but independently of the question of weight and workmanship, the general circumstances render this unlikely. This more particularly so, as at that time there was an abundant issue of what are now termed Anglo-Gallic coins, amply sufficient for the requirements of the English subjects or adherents in France. It is true that in 1426 an ordinance was issued for the coining of nobles, together with their half and quarter, in France, but this was probably not acted upon. If such coins had been struck in that country they would have

been of full weight, as about the same time the coins of Charles VII were put down, because they were of less weight than the money of Henry.

Before, however, proceeding further with the discussion of the origin of the pieces above described by me, I must now refer to the other series of nobles to which I alluded at the outset, and which consist of coins very similar in fabric, struck with the type and in imitation of the rose noble of Edward IV. I include in my Plate illustrations of three pieces from a number of these in my own collection (Pl. III. Nos. 1, 2, and 3).

This class of nobles of Edward IV has been long known in our cabinets, but has never hitherto, to my knowledge, been published or referred to in any numismatic work. They bear, in most respects, the same peculiarities of workmanship and design as are borne by the before-described nobles of Henry VI. The workmanship and fabric are coarse, the lettering and punctuation not less so, and the flans upon which the pieces are struck have a flatter and broader appearance than is the case with the ordinary rose noble. In addition to this, an invariable difference may be found in the shape of the rose on the shield. This is always of a large size and very flat in appearance, with conventionally shaped petals, and having the stamens and pistils formed of an inartistic assemblage of mere dots. The weight of these pieces, so far as my observation goes, is always more or less deficient. Those depicted in the Plate weigh only 118, 117½, and 117 grains respectively, though they are in the finest possible condition. The nobles of the ordinary type in my cabinet, in an equally fine state of preservation, invariably weigh from 119 to 120 grains, the latter being the standard weight. I give (Pl. III. No. 4) an illustration of a fine



example of the ordinary rose noble of undoubtedly English work, in order to facilitate a comparison between the two series.

I have no doubt that the inartistic coins comprised in the former series are of Flemish origin. In this connection it is probably not a mere coincidence that on one of the nobles (Pl. III. No. 3) the word *Ih&E* also occurs, instead of the usual *Ih&G*. On the two others, the *C* of *Ih&G* is reversed, and the reading apparently is *Ih&D*; and this is of most frequent occurrence on examples of this series, but never occurs on what I may term indigenous specimens.

There is throughout a striking resemblance between the work and fabric of the nobles of Henry VI firstly described and of the coarse rose nobles to which I have referred, but I have been unable to trace any facts which would lead one to the conclusion that they were struck by the same hand or at the same time.

There is no record of their having occurred together, or of their having together formed part of any known find. The rose nobles of Flemish workmanship are comparatively common, and of late years a fairly considerable hoard of them must have been discovered, as, not very long since, I selected several of my finest examples from the stock of a dealer, who must have acquired them together and not one by one. The nobles of Henry VI, of the same workmanship, are, on the contrary, of great rarity, so much so that, as before stated, the Rev. E. J. Shepherd, who was a skilled numismatist and accurate observer, considered his own example to be unique.

The genuine rose nobles (sometimes called rose ryals) obtained great currency abroad, in common with the

nobles of the Henries, which were termed Henry nobles. Both series are mentioned by name in most of the placarts and ordinances which made them current in most of the trading parts of Europe, and particularly in Germany and the Low Countries. In referring to Denmark, Snelling, in his *View of the Gold Coin and Coinage of England*, mentions the strange fact that two centuries previously to the date of his writing, the tolls of the Sound were computed in rose nobles.

It must also not be forgotten that the type of our noble was imitated by foreign nations for the purposes of their currency, in the same way as that of our English sterlings; and these imitations were struck in the names of several rulers over a long series of years, commencing with the Burgundian nobles of the fifteenth century, and including, in the following century, the Utrecht and well-known Campen nobles. These foreign nobles formed the subject of many petitions and acts during the reigns of the Henries and of Edward, and were strictly denounced, chiefly, it may be more than presumed, on account of their deficiency in weight.

My opinion is that there was also instituted in the Low Countries and perhaps elsewhere, late in the reign of Henry VI, a system of coinage of nobles of the English type, and that this continued in a greater degree during the reign of his immediate successor.

But again, I ask, if this were so, were such issues duly authorized, or were they the work of unskilful forgers? If issued by authority, for use in foreign parts, there should have been some record of this; but none exists. It appears, on the contrary, that with regard to silver money, an Act of Parliament was passed in the second reign of Henry VI, against money of Flanders and

Scotland, and this Act of the "pretended reign" of Henry VI is referred to in an Act of Edward IV, passed in 1477, on the subject of the general debasement of the coinage; and, as before stated, there is other documentary evidence to the same effect.

In those days the standard weight of the gold coins was scrupulously adhered to, and dies artistically, or at all events accurately engraved, would probably have been sent from England, if English coins of the recognised types had been required in foreign parts. The Calais groats and nobles of Edward III and Henry VI were quite as heavy in weight and of as good and tasteful design and workmanship as those of London.

As a matter of fact, no such English operations extended to the Low Countries during the period when the nobles in question would have been struck as would have necessitated an English coinage abroad.

It is true that during his stormy reign there were occasions on which Edward IV departed for the Continent. In 1470, when the Earl of Warwick, after his reconciliation with Queen Margaret, had invaded England, Edward, taken by surprise and unable to raise a sufficient force to oppose him, fled to Holland, and Henry was again acknowledged king for a further short period only. In 1475, Edward again, but this time as an invader and not as a refugee, formed an alliance with Charles of Burgundy and betook himself to the Continent with a view to wage war against his old enemy, Louis XI of France. The Duke, however, having come to an understanding with the French king, Edward acted prudently in concluding a seven years' treaty with the power which he had hoped to conquer. On neither of these occasions is it likely that, with Edward's authority, gold coins of inferior

weight would have been issued abroad by him or for his use.

On the other hand, there was during the whole period which we are discussing, a continuous and very flourishing course of commercial trading between England and Flanders, initiated at the time of the Norman Conquest and encouraged in later times by the marriage of Edward III with Philippa of Hainault.

It is more than probable, therefore, that the pieces to which I have referred were struck abroad for the purpose of being circulated, in the course of trade, either in this country or in the country of issue, at a profit to the issuers. Hence their inferior weight and workmanship.

In my cabinet are two unpublished and probably unique angels of the reigns of Henry VII and Henry VIII respectively. I have added illustrations of these (Pl. III. Nos. 5 and 6), as from the deficiency in their weight, which is $74\frac{1}{2}$ grains in the case of the angel of the former monarch, and $75\frac{1}{2}$ grains in that of the latter, it has suggested itself to me that they, also, may be of foreign origin. There are many points of resemblance in the work of the former angel to that which appears on the Flemish rose nobles, and there is a further peculiarity in the fact that the numerals VII follow the name of the king. This does not occur on any other angel of that reign.

The angel of Henry VIII is of much more florid work, and the lettering entirely different in character from that on the angel of Henry VII; and if it be not a genuine pattern of English work, I should be disposed to attribute it to the hand of some Flemish artist. The one point of connection between the two angels is the similarity of workmanship, and in the formation of the badly designed

small crosses which divide the words, and which differ materially from those which are found on the ordinary angels of the two kings.

These few notes may give an impulse to a further study of coins and of records, and may, I hope, lead to some discovery which will throw a light upon a subject not hitherto discussed, and by no means free from difficulty.

H. MONTAGU.

IV.

FIND OF COINS AT NESBØ, NORWAY.

A DISCOVERY of nearly four hundred silver coins recently recorded by Mr. Gabriel Gustafson, the accomplished Keeper of the Archaeological Museum at Bergen,¹ seems of such interest, that it is desirable to place its principal features before the readers of the *Numismatic Chronicle*.

At a place known as Nesbø, in the parish of Bolse, in Romsdal, about fifteen English miles east of Molde, there was found, in August, 1891, a hoard of 309 silver coins, either whole or broken, together with a bar of silver and some fragments of an ornament of the same metal. In the following month more coins were discovered on the same spot, bringing up the whole number to 389, nearly the whole of which are now in the Bergen Museum. They had been deposited in a small square wooden box, apparently of ash, at but a little distance below the surface of the ground, less than thirty yards from the road leading from Molde to Kleive. The following summary shows the constituents of the hoard :-

Anglo-Saxon, &c. :

Aethelred	.	.	.	91
Cnut	.	.	.	168
Barbarous	.	.	.	5
Irish	.	.	.	3
				— 267

¹ *Bergen's Museums Aarsberetning* for 1891.

Brought over	267
German	119
Russian	1
Cufic	2
Total	<u>889</u>

It is with the Anglo-Saxon coins that we are most interested, of which 146 examples only were not in a broken condition, though the fragments of most of the others were susceptible of being arranged together so that the types and legends could be recognised. It will only be necessary to call attention to the types, legends, and varieties not already recorded in Hildebrand's monumental work. The first letter prefixed to each gives Hildebrand's type, the others indicate the inscription on the obverse. The references are of course to the second edition, Stockholm, 1881.

AETHELRED II.

BATH.

D, a irr. iii. + *ÆLFRIEL M^oO BAÐ*. Var. of Hild. 39.

BREWTON.

D, a 5. + *ÆLFPINE M^oO BRIV*. This is a new mint for Aethelred, though already known with the same moneyer for Cnut.

DERBY.

G, e 8.

Obv. — + *ÆDELRED REX ANGLORVM*. Holy Lamb r., with nimbus and cross, below, within a beaded tablet A : *W*.

Rev. — + *BLALAMAN (O?) DYREBY*. Bird with out-spread wings.

This coin was unknown to Hildebrand, though he records a coin of type E of the same moneyer and mint.

He knew but of seven examples of Aethelred's extremely rare type G in 1881. The form Dyreby for Derby does not occur in Hildebrand.

WINCHECOMBE.

E, a 3. + BYRHTMÆR M·O PINEL.

Mr. Gustafson remarks that this is a new moneyer for this town, but as Byrhtmær was a Winchester moneyer, his attribution of the coin to Winchcombe may be erroneous.

CNUT.

BRISTOL.

Ed, a 6. + LODAMAN ON BRIE. This is a new variety like Hild. 83, but type Ed instead of E, and legend a 6, not a 5.

DOVER.

E, a 8. + EADV.INE ON DVFER. New, so far as the name of the town is concerned. The F is a runic N.

GLoucester.

G, a 2. + L. EOFSINE ON LL.E.P Hildebrand gives only type E to this moneyer.

LEICESTER.

E?

Obv.—ENVT RE+ ON ANGEL

Rev.—+ ÆD:ELP(I) M·O LEHR.

This obverse legend occurs but once in Hildebrand with the moneyer Ednod at Huntingdon.

LONDON.

New type, a 5. + LIFIS MO LV. This has type A for the obverse, with B on the reverse, like the scarce coin of Aethelred, type D a.

SOUTHWARK.

E, a irr. 129. + ÆDELPI MON SVDL. A new moneyer for this mint.

THETFORD.

G 1

Olv.—+ ENVT REX ALLO.*Rev.*—+ BRVNSTAN ON D(E). A new variety.

In copying these from Mr. Gustafson's paper I have omitted a considerable number of less important varieties, especially when the coins presenting them are imperfect, or not well preserved.

The solitary Russian coin in the hoard is of Jaroslaw Wladimirowitsch of Kiew (1016—1054), and of great rarity. The German coins are for the most part of Henry II., and all of types given by Dannenberg in his *Deutsche Münzen*, 1876. The Cufic pieces are of Al-Mutadid-billah, and probably Ismail ibn Ahmad.

The date of the deposit is fixed by Mr. Gustafson at within a year or two before or after A.D. 1030. He also gives an analysis of three other Norwegian hoards of about the same period, viz., Sletheid, Egersund, and the Swedish find of Brøholt, the latter comprising some coins of Edward the Confessor, and shows that, as a rule, they contain among the Anglo-Saxon coins present about 50 per cent. struck in the south-eastern district of England, with Oxfordshire, Bucks, Herts, and Essex; about 25 per cent. struck in the middle eastern district, with Northampton, Leicester, Nottingham, and Lincolnshire; about 15 per cent. from the south-west, with Dorset, Wilts, and Gloucestershire; and only about 10 per cent. from the northern and middle western districts together.

Mr. Gustafson has been good enough to present a copy of his paper to the Society, so that those who are desirous of fuller particulars than what are given in this short notice will readily obtain them.

JOHN EVANS.

V.

COINAGE OF AETHELBALD.

(See Plate IV.)

IN vol. vii. of the third series of the *Numismatic Chronicle* is a paper by Mr. Montagu, entitled "The Coinage of Aethelbald of Wessex." The paper is headed with an engraving of Mr. Montagu's coin, and the author gives us the history of the personage to whom it is attributed—how he came to the throne, and of the footing on which he stood in relation to his father, Aethelwulf. Mr. Montagu refers at the end of the paper to the existing coins of Aethelbald, then two in number and from the same dies, and to the engraving of a third in Hawkins (No. 168). Since 1887, the date of Mr. Montagu's paper, a third specimen of the coin, also from the same dies as the previously described pair, has become known, and as the origin of all these is shrouded to a certain extent in mystery, its authenticity is held in doubt by some of our best judges. I purchased the coin fully believing in its genuineness, and it is in the hope of showing the good ground for this belief that I venture to bring the subject again before the Society.

The type of the reverse of these coins is the common one of a double cross, with the moneyer's name and title in the arms and angles. Pieces of this type occur under Aethelwulf, Aethelbearht, and Ceolnoth, Archbishop of Canterbury. Hawkins describes the type as No. 1 of



ÆTHELWULF - ÆTHELBALD .

Æthelwulf, but it must clearly be referred to quite the end of his reign, as it was continued by, and, indeed, occurs on the large majority of, Æthelbearht's coins. All Æthelbald's pieces are of this type, and Ceolnoth used a full-face bust with the same reverse. The Archbishop held office from 830—870, Æthelwulf reigned from 837—856, Æthelbald from 855—860, and Æthelbearht from 856—866. This type was, theroforo, probably in use from a little beforo 856 to some time before 866, *i.e.* for a period of not moro than ten years. I would suggest that the period may have been still less, as, with four exceptions, all Æthelwulf's moneyers of this type, thirteen in number, also coined money of the same type for Æthelbearht, and that they are the same men a comparison of the coins of the two monarchs will show, as they exhibit the same workmanship. The type, therefore, that wo should have expected Æthelbald to havo used is clearly the type that has turned up. The moneyer of these coins again answers our expectations. Torhtulf (the moneyer answerable for this triplet) coined for Æthelwulf and for Æthelbearht pennies of this type only. Besides these pieces Mr. Montagu has shown that Hawkins' No. 168 is likely to havo been a genuine piece, and here again Beahmund coined for Æthelbearht. Lastly, I have a cast of what I consider must have been a genuine coin of Æthelbald, and this again exhibits the same type as the others, and gives the name Vermund, also a moneyer of the two kings before-mentioned.

Of all the moneyers who struck for both kings Torhtulf is the only one who placed a fillet on the king's head. All his pieces, whether of Æthelwulf or Æthelbearht, have it. Vermund did not use a fillet, and my cast is without it.

The coins of *Æthelwulf* struck by *Torhtulf* are quite common, and the name occurs in many of the old catalogues of celebrated collections. At the time of obtaining the *Æthelbald* penny I also got one of these *Æthelwulf* pence by *Torhtulf*, which originally came from the *Doulton* cabinet, and the genuineness of which there is no reason to doubt. This coin on examination proved to be from the same dies as the three coins of *Æthelbald*, and only differs from them by having *VVLF* in place of *BALD*, all other marks, even down to irregularities in the die, coexist on these pieces.

The question then naturally arises,—Are these *Æthelbald* pence false? If so, they must fall under one of the three following classes: 1. Cast coins; 2. Electrotypes; 3. Struck from false dies. Of these classes I think we shall all be content to dismiss Nos. 1 and 2. The coins are not cast nor electrotyped. No. 3 remains. Now there are not many ways of making false dies; perhaps those ways may be classified as (*a*) an entirely new fabrication, and (*b*) a copy made by the impress on molten metal. The idea of such a thing as an electrototype die must, I think, be placed on one side. Nobody can give any definite information about such a process, and even if such a process were to exist the results would be, I suppose, absolutely irrecongnisable; we could not tell the forgery by any means and the idea of forgery would probably not arise. Now, for an accurate copy by means falling under class (*b*) Mr. Pinches, the well-known die-sinker, tells me that a thick coin is required, and that then only one surface can be used, the other side being totally destroyed by the process. The argument, therefore, is narrowed down to this point: Are these *Æthelbald* pence the result of

a more or less modern forger's efforts and struck from utterly false dies? If that be the case we are to credit a man with the power of reproducing absolutely all the features and style of the old Saxon work and of being able to strike a coin with an unassailable edge. Moreover, if the *A*ethelbalds are false, the *A*ethelwulf must also follow; and that brings me to the next point: Which is the altered coin? I have had both pieces photographed and enlarged together (Pl. IV.), and on the photograph the letters are more easily studied than on the coins themselves, though, of course, the coins show all that the photographs do. On an examination of *A*ethelwulf's piece the first V is seen to have a curved upper border between the strokes. This, on comparison with the other piece, is found to be in the position of the upper curve of the B. A white patch between the Vs on the *A*ethelwulf also corresponds with the light portion of the A on the *A*ethelbald, and the point of juncture of the A and L in Bald is quite noticeable on the *A*ethelwulf, where the second irregularly shaped V touches the L. I mention these points as they are most marked, and seem to prove conclusively that the *A*ethelwulf is the altered piece. In the stereoscopo again, images of the two coins combine perfectly, except as regards the four altered letters, and with regard to these letters the parts altered correspond accurately with the original letters. Mr. Montagu's paper throws light on this seeming anomaly of the son's die being altered to suit the father. He shows that *A*ethelbald reigned concurrently with his father for a considerable time.

Now with this additional information about these pieces how does the argument in favour of forgery appear? That a person, certainly not within the last fifty years,

made false dies for a coin of *Æthelbald*, and that having struck some specimens, three of which are still in evidence, he altered the obverse die to suit *Æthelwulf* (notice, *Æthelwulf*, not *Æthelbearht*), and altered it leaving trace of the original lettering; that coins from the altered die, having been struck, passed without a suspicion for many years through the hands of experts; that, besides copying the lettering and style of the ancient coins he was also able to place marks in the die, irregularities and roughnesses, which are found in original coins. I would draw attention to the peculiar marks in the field of the coins, notably about the letters F and M on the reverses of those coins from the same dies, and invite comparison of those marks with others found about the field of the reverse of another coin of *Æthelwulf*, by *Torhtulf*, from totally different dies. These marks and unevennesses are of quite the same character, as indeed is the whole workmanship of these coins.

Having shown, I hope satisfactorily, the great improbability, if not impossibility, of these coins having been the result of skilful forgery, I wish to draw attention to some details which throw additional light on their genuineness. Firstly—The relation of the obverse to the reverse in each piece varies, though very slightly. Secondly—The dots round the edges of the coins are struck differently on each coin, showing the difference in striking power and in adjustment of dies which would characterize the ancient but not the modern worker. There are, moreover, two other points which may be noticed. These coins are all from the same dies; this, at first sight, tells against them, especially as they are such rarities; but this fact is of small import when it is remembered that there are other rarities of the first order

struck from identical dies—Eustace, Stephen, and Matilda, two of each from the same dies I have noted, and one of each of these from the same dies is in the national collection. Again, from the undescribed mint of Wallingford, of the canopy type, I have two pence of William I. Sir John Evans also mentions two Matildas from the same dies.

Weighing all these facts carefully I have come to the conclusion that these pieces are all genuine, and that the alteration was made by Torhtulf to save himself trouble, in the same manner as a man might be tempted to save himself time and unnecessary work in the present day.

L. A. LAWRENCE.

VI.

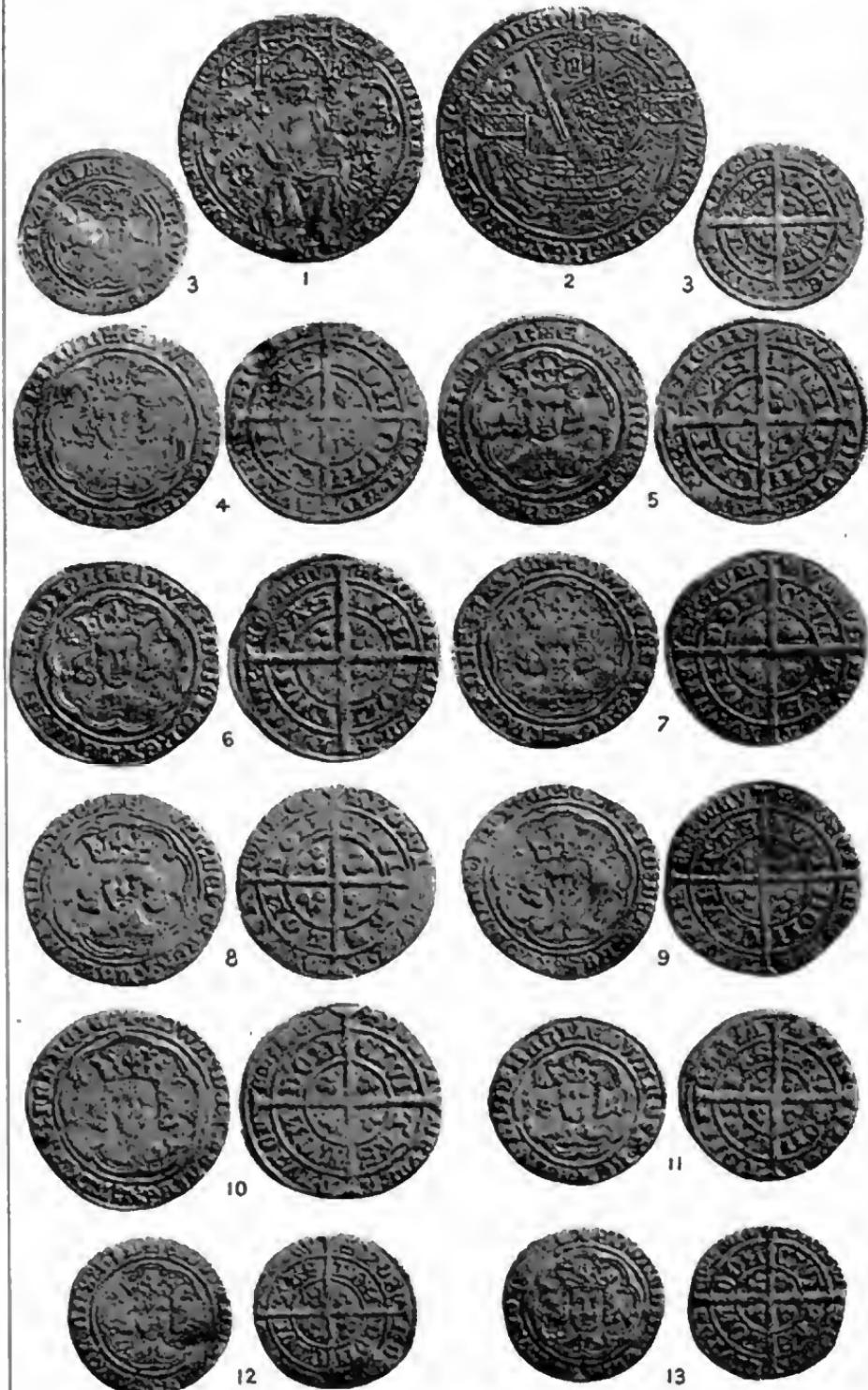
SILVER COINS OF EDWARD III.

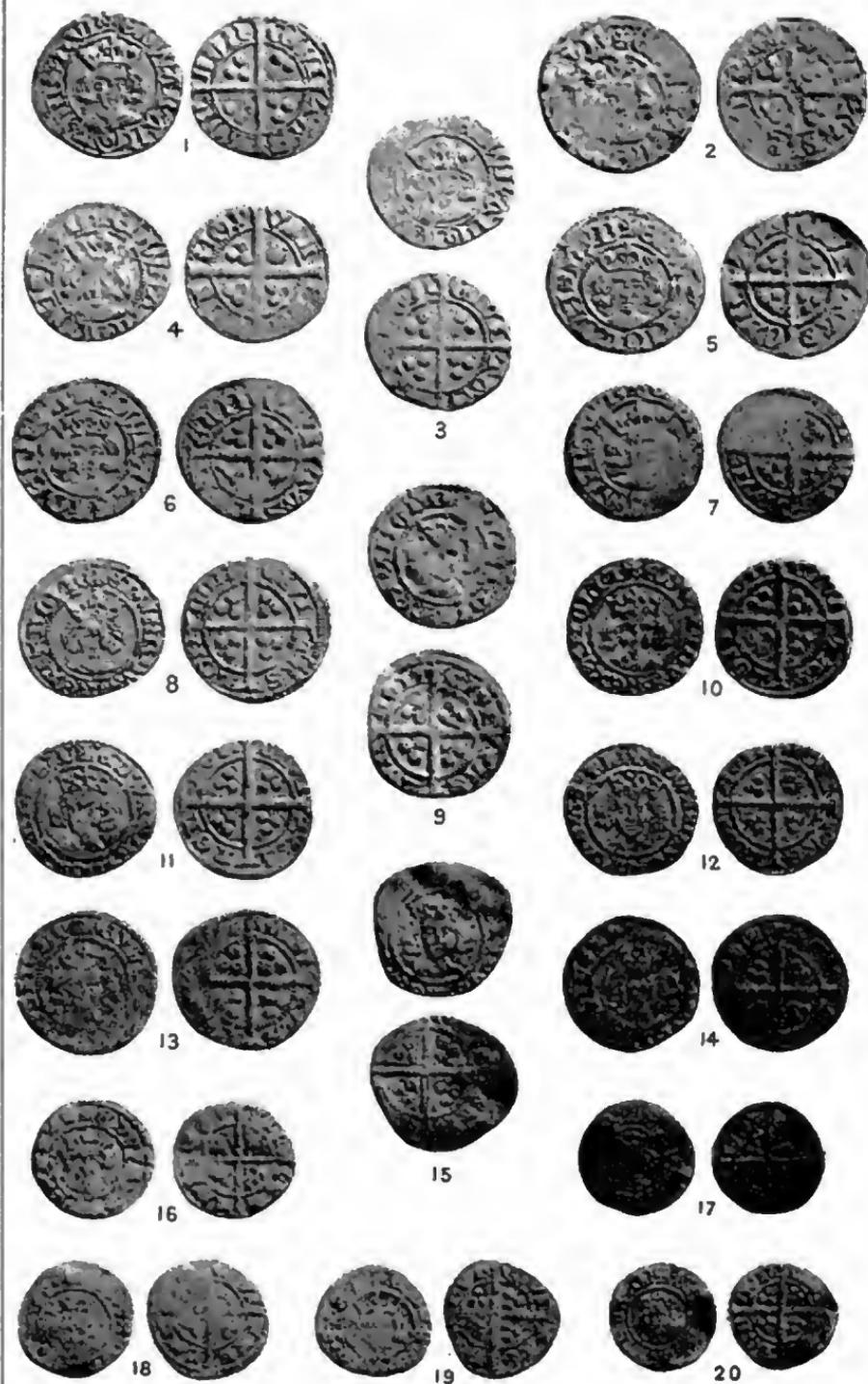
(See Plates V. and VI.)

FOR some time past I have been studying the coinage of Edward III by the light of some recent acquisitions, and I think the time has now come when I may place the results before the Society and ask their judgment thereon.

The specimens I refer to were selected chiefly for small varieties of type, lettering or legend, and I had no idea at the time of obtaining most of them that they would constitute anything like groups.

Edward III's coinage may be arbitrarily divided into two main series, (a) those issued before his twenty-fifth year and struck at more than eighteen grains to the penny, and (b) those struck at this weight and commencing in 1351. This rough division has an advantage in one way, in that all the well-known coins of this king—gold nobles and parts, and silver groats and parts—fall into the second division, leaving to the earlier group florins and heavy nobles with their subdivisions, and the little-known silver pence, halfpence, and farthings. I propose dealing with the late group first, as it is fairly well described in Hawkins, and will only need some additions here.







The treaty of Bretigny is used as the basis of sub-division of this large class. The periods are characterized by the presence of the French title in the first, its absence and the substitution of that of Aquitaine in the second, and the use of both titles in the third period. The groats are the silver coins referred to as exhibiting the full legend, but the smaller pieces follow by comparison of type and lettering. On all the groats described by Hawkins the English and Irish titles are present.

I have now to chronicle a group on which this Irish title is missing, and which I place quite at the end of Edward III's reign:—

GROAT.

1. *Obv.* — $\pmb{\times}$ EDWARD \times DI \times GR $\pmb{\alpha}$ \times R $\pmb{\alpha}$ X \times ANGL $\pmb{\alpha}$ \times $\pmb{\times}$ FR $\pmb{\alpha}$ NDIA $\pmb{\alpha}$ \times M.M. cross patée. Two pellets above crown. Nine arches, all fleured.
2. *Rev.* — $\pmb{\times}$ POSVI D $\pmb{\alpha}$ V $\pmb{\alpha}$ M \times $\pmb{\alpha}$ DIVTOR $\pmb{\alpha}$ M \times M $\pmb{\alpha}$ V. CIVITAS LONDON. Mark of contraction over M $\pmb{\alpha}$ V and DON. Crosses as stops on both sides. [Pl. V., No. 10.]
2. Same, but omits \times after FR $\pmb{\alpha}$ NDIA $\pmb{\alpha}$, and pellets over crown; omits also the marks of contraction, but adds a saltire \times before CIVI and LOW.

HALF-GROAT.

1. *Obv.* — $\pmb{\times}$ EDWARD \times DI \times GR $\pmb{\alpha}$ \times R $\pmb{\alpha}$ X \times ANGL $\pmb{\alpha}$ \times $\pmb{\times}$ FR \times M.M. cross patée. Two pellets above crown. Nine arches, all fleured.
2. *Rev.* — $\pmb{\times}$ POSVI D $\pmb{\alpha}$ V $\pmb{\alpha}$ M \times $\pmb{\alpha}$ DIVTOR $\pmb{\alpha}$ M \times M $\pmb{\alpha}$ V. CIVITAS LONDON. Pellet before CIVI, LOW, and after DON. [Pl. V., No. 13.]

PENNY.

1. *Obv.* — $\pmb{\times}$ EDWARDVS \times R $\pmb{\alpha}$ X \times ANGLIA. M.M. cross patée. Cross on king's breast.
2. *Rev.* — \times CIVITAS LONDON.
2. *Obv.* — $\pmb{\times}$ EDWARD \times R $\pmb{\alpha}$ X \times ANGL $\pmb{\alpha}$ \times $\pmb{\times}$ FR \times
2. *Rev.* — \times CIVITAS LONDON. [Pl. VI., No. 12.]

3. *Obv.* — $\pmb{\times}$ EDWARD x R x $\pi\eta\acute{\eta}L$ x $\pmb{\times}$ FR $\pi\eta\acute{\eta}A$ x Annulet on king's breast.

Rev. — CIVITAS (LONDON). Much clipped.

4. *Obv.* — Same die.

Rev. — $\pmb{\times}$ CIVITAS x (LO) DON

From the great similarity to each other in both type and lettering these coins clearly belong to the same group. They all present saltires between the words as stops, and they all resemble in a marked degree the corresponding denominations of Richard II's coinage. The undescribed features about them besides the general type are, on the groats, the absence of the Irish title; on the half-groat the addition of DI GRA and legend "adivtorem mev"; on the pence the legends of 2, 3, and 4 are new. Hawkins refers the annulet stops to a period ending with 1369, all coins after this period having the saltire only. I do not know what authority there is for this statement, but certainly these, the latest of all Edward's coins, bear out the statement.

At the other end of this group (b) I must also add some specimens:—

GROAT.

1. *Obv.* — $\pmb{\times}$ EDW π R 'o D π GR π o R π X o $\pi\eta\acute{\eta}L$ 'o $\pmb{\times}$ o FR $\pi\eta\acute{\eta}C$ o D o η yB' Nine arches, all fleured.

Rev. — $\pmb{\times}$ POS VI o D π VM o π DIVTORE π M o M π VM CIVITAS LONDON. [Pl. V., No. 5.]

2. Same, but EDWARD o D o G o.

HALF-GROAT.

3. *Obv.* — $\pmb{\times}$ EDW π ARDVS o R π X o $\pi\eta\acute{\eta}L$ o $\pmb{\times}$ o FR $\pi\eta\acute{\eta}C$. Nine arches, all fleured.

Rev. — $\pmb{\times}$ POS VI o D π V o π DIVTORE π M CIVITAS LONDON. [Pl. V., No. 3.]

4. *Obv.*—Same legend and mint-mark, but FRANCOR 8 Nine arches, the two over crown not fleured.

Rev.—* POSV I o D^EV · · · DIVTO R^E o M^E CIVITAS L^ONDON

These groats and half-groats clearly fall together as they have all the peculiarities in common. The E is formed without the vertical bar, the C follows suit, and the M is Roman, not Gothic. The coins bear the Roman II, and annulets are used as stops. Now, in Ruding III, Sup. II, ii. 30, is an engraving of a coin in the Hunter Museum at Glasgow. I asked for a cast of this coin, and the librarian kindly sent me one, the facsimile of which is in Plate V., No. 4. This coin, called a pattern groat of Edward III, and I suppose we must look upon it as such, has crowns in the angles of the cross instead of the usual pellets. It also has the reverse mint-mark on the right side of the large cross dividing the coin; further, it reads "ADIVTORE." In every other respect—type, peculiar letters, &c., it agrees in detail with my groat No. 5. The legend on this class refers it to the earliest period, viz. that before the treaty of Bretigny. I go further and say that it is the first groat struck for currency in England, and that it is the piece immediately following the pattern groat. On reference to the documents on this subject it will be observed that groats and half-groats were first coined by authority of the indenture of 1351 (William of Worcester, a contemporary, calls them new money), and, although Edward I, and even Henry III, ordered larger pieces, these certainly, if struck, never became current, otherwise why the epithet new in a contemporary writer? and, moreover, the indenture of 1351 is the first of Edward III's wherein any larger silver piece than the penny is mentioned. Clearly then these pieces.

were the outcome of that indenture. They weigh eighteen grains to the penny. Mr. Montagu's pied-fort of the half-groat exhibits the same peculiar style and lettering, and, in common with others, I have a noble of this coinage. It reads $I\ddot{h}ES$ at the commencement of the reverse legend instead of $I\ddot{h}G$, and, like the silver coins, bears all the characteristic letters.

In connexion with this group there are several minor varieties which are worthy of notice, as perhaps they may form important series if they can ever be completed. The 1351 to 1360 period claims most of them. On a groat and penny in my possession a small cross may be observed between the pellets in one quarter. I have seen the half-groat with the same peculiarity. An annulet in one quarter is another mark which occurs on some groats, half-groats, and pence of this period, specimens of which I have. Both crosses and annulets are found on the bust in the pence, and the latter ornament occurs in the spandril under the bust on the larger coins. On these pieces also the tressure is occasionally, though rarely, ornamented with well-marked fleur-de-lys in the place of the usual trefoils, or this mark may occur only on the tressure on the bust. Between the letters $T\cdot\pi\cdot S$ on the reverse of some groats I have observed a small dot, and this is probably some secret mark, as it exists on one penny. The groats bearing it are not precisely alike. In the 1360 to 1369 group I have two curious groats, one like Mr. Neck's quoted by Hawkins, with annulets at the sides of the crown. The obverse legend reads $\ddot{h}IBR\ \ddot{\pi}\ \piAQ$. The spelling of the Irish title with I and π is as curious as the abbreviation of that of Aquitaine, Pl. V., No. 8. The other groat reads $\pi\pi\pi\pi$, and, as if to obtain room for this very rare final π , the D in $\pi DIVTO\pi\pi$ is omitted (Pl. V., No. 7).

I now approach the second portion of my subject, the coinage of the earlier years of Edward III, 1327 to 1351. We have, of the greater part of this period, but little documentary evidence, but we do know that on several occasions Parliament was approached on the subject of the coinage, and especially of the silver coinage which had become very scarce, and in quite early years some half-pence and farthings were ordered to be struck, but beyond this simple ordering no conditions as to design or weight are now to be found. Eighteen years after his accession Edward commenced reducing the weight of the penny from about twenty-two grains to twenty and a quarter for two years; then to twenty grains for five years; and afterwards to eighteen grains. The question is, what has become of these coinages; and I hope to be able, to a certain extent, to answer that question by means of the information afforded in the pages of the *Chronicle* and by a few new facts, as also by some fresh light thrown on the old ones. I here repeat, we must only expect pence, half-pence and farthings as the silver coins, as these are the only silver denominations mentioned in the indentures till 1351. Of the gold coins, florins and heavy nobles, I shall say nothing, as they are too well known to need any reference except for the purposes of comparison.

Sainthill, in 1851, was, I believe, the first to discriminate among the ordinary Edward pennies some of a different type and workmanship which he referred to Edward III. He brought the subject before the notice of the Society and, in the discussion which followed, Messrs. Cuff and Bergne expressed qualified opinions on the likelihood of the attribution. Mr. Arthur Evans,¹ after the

¹ Vide *Num. Chron.*, N.S., vol. xi., p. 264, *et seq.*

careful examination of the Oxford hoard, arrived independently at the same conclusions as Sainthill. Since then papers have appeared in the *Chronicle* from the pens of such sages as Neck and Longstaffe also following in the same line of thought.

As to the coins themselves, they are characterized by a large head with bushy, well-standing-out curls, and a very large crown of different design from that found on undoubtedly early Edward pence. The lettering, too, is most florid and ornamental, and is in great contrast with that shown on the pieces of the earlier kings. One, indeed, wonders how these coins were ever classed otherwise than by themselves. The whole group may need some subdividing, as coins belonging to it exhibit some the Roman *N*, some the English variety, *N*; again, some have both varieties, one on the obverse, and one the reverse. Further, in some cases, annulets divide the words. The legends on the obverses are *EDW.*, *EDW^{AN}.*, *EDW^{AN}R.*, *R.*, *ANGL.*, *DNS*, *hYB*, and some also read *R^{EX}*. The mints from which the coins come are London, York, and Durham according to Mr. Evans, and I have been able to add Reading and Canterbury to this list.

It is a most significant fact that coins of this type should have been issued from these five mints alone out of all the mints striking *EDW.* pence, and that these five mints should be all those at which Edward III coined. The Canterbury penny is a new one. The legend, as will be seen by examination of the photograph, Pl. VI., No. 5, has the Roman *N*'s on one side, English on the other. The weight is nineteen grains. According to Hawkins very little credit is given to this monarch's having struck at Canterbury, but the town is mentioned in documents, and with this penny before us there can be no

doubt that Edward III did coin at Canterbury. Mr. Samuel Smith, jun., has pointed out in *Num. Chron.*, 3rd Series, vol. vi, that four coins of Canterbury, probably of this type, were found at Beaumont, and described by Mr. Keary in his account of the find at that place. (*Num. Chron.*, 3rd Series, vol. v.) I looked up the reference, and I noted that the R in Cantor is certainly described as English, and therefore there can be very little doubt that other coins of this type besides mine still remain.

A word or two about the Reading mint. It existed in earlier times, and John, Henry III, and Edward I confirmed the privileges of the abbots of striking pennies. Edward II withdrew these privileges, and his son Edward III, in 1338, granted the right not only to strike pence, but halfpence and farthings, and added that the mint should be in Reading instead of in London, where it had previously been. The halfpence of Reading must therefore be assigned wholly and solely to Edward III. They are of two different types, illustrated on Plate VI., Nos. 16 and 17. Resembling in the most marked way the halfpenny (No. 17), is the Reading penny (No. 4), and every specimen of the penny I have ever seen is of this type, and therefore must belong to Edward III. It follows that we must relegate to the class of John and Henry III, Edward I's Reading penny, and admit that it is still undiscovered. Mr. Longstaffe remarked on the absurdity of the divorce between the pence and halfpence of Reading and the assignment of the pence to Edward I and the halfpence to Edward III. As dies were delivered to Reading in 1338, it is natural to suppose that these pence and halfpence should be the outcome from such dies. The coins naturally would be of the same type as those current of other mints at the

same time. As I have shown, London, York, Durham, and Canterbury, did issue coins of the same type as the Reading penny, and London issued halfpence of both types of the Reading halfpence, one of which I figure here. (Plate VI., No. 18.)

We are therefore to conclude that coins of this peculiar type were in circulation before 1338, the date of the Reading indentures. This being so, these must be heavy coins; and this leads to the examination of the weight of these florid pieces. I have 17 of them, and adding the 2 in the British Museum, the average weight is just over 19 grains. Mr. Evans found that an average of 7 specimens was only 18½ grains. I cannot account for the discrepancy, but I have weighed mine carefully, and have selected all in any decent state of preservation, except those much clipped. The heaviest weighs 21 grains, though only in fair preservation, and the lightest 17 grains. Now, by weighing all my later specimens, and they are many, of Edward III's pence, and by applying the same conditions, I can only get an average weight of 16½ grains. As, therefore, there is a loss of 1½ grains on the 18 grain pence, supposing only the same relative loss to take place on the larger pence now weighing 19 grains, and seeing that the weight obtained is 21 grains, this is sufficiently near, I think, to the indenture weight for us to feel satisfied that these indeed are the heavier coins of Edward III.

On the florin and on the first heavy noble is this same peculiar head (Plate V. Nos. 1 and 2), and on the second heavy noble some alteration has already taken place; arguing from the gold to the silver coins we find that after the date of the first heavy noble, silver pence should bear the later head. This fixes the date for the disap-

pearance of this bust at 1345, at which time some coins should have been struck at a lighter weight.

An examination of the dates of the bishops of Durham at this time and of their coins will lead to still further conclusions. Bishop Beaumont died in 1333. His coins were marked with a rampant lion and a fleur de lys, both taken from his arms. No coins of his have been found of different types; so we must suppose that during the earliest years of Edward III the coins struck before his time were continued. The next bishop, De Bury, is said to have struck no coins, chiefly because coins bearing his arms have not been found. Lately there has been a discussion about this point raised by the interesting details given by the President in describing the Neville's Cross hoard. In the paper, (*Num. Chron.*, 3rd Series, vol. ix., p. 312), certain coins were attributed to De Bury. Mr. Montagu, in a later number of the *Chronicle*, challenged the views put forward by the President, and gave reasons for returning to the old idea, that De Bury did not coin. His arguments briefly are, Firstly, that De Bury had no patent to coin till 1344. Secondly, that the dies granted by that patent did not arrive till 1345, probably too late for use by this bishop, who died in that year. Thirdly, that, looking to the character and occupation of the prelate, he was a likely man to have waived any privilege of coining, perhaps in favour of the king, and that perhaps he was really too much occupied to have taken interest in the subject of coinage. Lastly, Mr. Montagu puts forward the undoubted fact that no coins bearing any trace of De Bury in the shape of arms or peculiar marks have ever been discovered.

Now I submit that from these arguments we must not conclude that De Bury did not coin. To treat the facts first, the absence of any peculiarly marked coins

is quite in agreement with the following bishop's (Hastfield's) pieces; they bear merely the bent crozier. Richard II's Durham pence do not even bear that, and under the succeeding kings to the middle of Henry VIth's reign there is no peculiarly episcopal mark on the Durham coins. Again, the testimony of the indenture and the actual delivery of the dies speaks volumes in favour of De Bury's having every intention of coining. Let me also suggest that, though the first patent to De Bury extant is dated 1344, there is nothing to preclude us from believing that he may have had many patents before, which have disappeared with time. The Durham records are by no means complete, and Noble searched unsuccessfully for some, which he might have reasonably expected to find.

The details of the Durham pence of this peculiar type in my cabinet are:—

1. *Obv.*—**EDW R** **AN6L DNS** **hyB.** M.M. cross patée.
Rev.—**CIVITAS DVNALM.** Wt. 19.5 grs. [Pl. VI., No. 6.]
2. *Obv.*—**EDW** **... N6 DNS** **hyB.** M.M. cross patée.
Rev.—**VILLA** **x** **DVRRA** **... Crozier to right before D;**
annulet in centre of cross. Wt. 18.5 grs. [Pl. VI., No. 7.]
3. *Obv.*—**EDW** **... N6 DNS** **hyB.** M.M. cross patée.
Rev.—**CIVITAS DVROLM.** Compartment in centre of cross
containing a pellet. Wt. 19.5 grs.

No. 1 may possibly be a coin of the regal mint at Durham; but No. 2, though of the same type, must be from the bishop's mint, as it bears the bent crozier. No. 3, with its peculiar mark in the centre of the reverse, I take to be also episcopal. Hawkins, No. 313, shows a reverso of a Durham penny with the bent crozier and two pellets in the central compartment. Now there are certain conditions which must be fulfilled before we can

assign a Durham penny to Bishop de Bury. The type must be that of Edward III. It must be an early type, and of heavy weight; and, lastly, it should bear some episcopal sign. I think, with the weighty arguments before them, the Society will agree with me that at any rate No. 2 fulfils all these conditions. If so, it must be undoubtedly one of Bishop de Bury's coinage.

The attribution of these early pence to Edward III, upsets two points in the classification of the coins of the early Edwards; first, the clothing test. These pence all bear evidence of clothing about the shoulders of the king. As a matter of fact, there is good evidence of drapery on all Edward III's coins; but fine specimens are required before it is noticed, as it seems to be one of the first features of the piece to disappear with rubbing. The king is represented in a tight-fitting vest, and the neck line of this is quite visible, especially on the groats. It is only when we come to the Henry coins that this line is really absent, and doubtless this is due to the eye of the engraver having been accustomed to worn coins, and to his having supposed that they represented to him, as to us, an undraped bust. The other point is a far more important one, viz., the spelling test. We can no longer assign to Edward I all those coins spelling the king's name Edw, or to Edward II, the intermediates, Edwa, Edwar, and Edward, as all these modes of spelling were used by Edward III. As between the first two kings the distinction, however, still, I think, maintains its ground. Edward I's pence clearly always read Edw, and Edward II's the other forms, so that when Edward III's coins are removed from these two classes the name test is decisive. There is one other class of pence which should also be placed on one side before deciding

to which Edward a penny is to be attributed by the spelling test. It is that class bearing the legend Edw Rex. There are many reasons why these should belong to Edward III also; and in my own cabinet I place them among that monarch's coins. I have not yet come to any definite conclusions about them, and therefore have decided not to attempt more here than to refer to them in these general terms.

I did hope, in concluding this paper, to have given an accurate list of unpublished small varieties of the coins of Edward III. The series, however, is a large one, and I have not so far been able to obtain descriptions of varieties which I know to exist, but I hope at some future time to rectify the omission.

EXPLANATION OF THE PLATES V. AND VI.

Pl.	No.	
V.	1.	Obverse of the florin.
	2.	„ of the first heavy noble.
	3.	Roman M half-groat, 1851.
	4.	Pattern groat with crowns in angles.
	5.	Roman M groat, 1851.
	6.	Ordinary groat, 1st period, 1851 to 1860.
	7.	Groat, reading <i>SDGVN</i> , 1860 to 1869.
	8.	Groat, with annulets at sides of head, 1860 to 1869.
	9.	Ordinary groat, 2nd period, 1860 to 1869.
	10.	Groat of latest coinage, 1869 to 1877.
	11.	Ordinary half-groat, 1st period, 1851 to 1860.
	12.	„ „ 2nd period, 1860 to 1869.
	13.	Half-groat of latest coinage, 1869 to 1877.
VI.	1.	Heavy penny, London, <i>SDWA</i> , before 1851.
	2.	„ „ York, <i>SDW</i> , before 1851.
	3.	„ „ London „ „ „
	4.	„ „ Reading „ „ „
	5.	„ „ Canterbury „ „ „
	6.	„ „ Durham „ „ „
	7.	„ „ De Bury, Durham. „

Pl. No.
VI. 8. Transitional penny between heavy and light coinage.
9. Light penny, London, 1st period, 1351 to 1360.
10. " " " annulet on king's breast.
11. " " " 2nd period, 1360 to 1369.
12. " " " latest coinage.
13. " " Durham, 1st period, 1351 to 1360,
 crozier to right.
14. Light penny, Durham, 3rd period, 1369 to 1377,
 crozier to left.
15. Light penny, Durham, 2nd period, 1360 to 1369,
 crozier to right.
16. Halfpenny of Reading.
17. " " of different type.
18. " London, resembling in type No. 16.
19. " " resembling the ordinary pence,
 the only one I have seen.
20. Halfpenny of London, resembling Richard II's half-
 pence.

L. A. LAWRENCE.

VII.

A PORTRAIT MEDAL OF PARACELSIUS ON HIS DEATH
IN 1541.



Fig. 1.

Now that all those who have best studied his works have come to the conclusion that Paracelsus was not "the prince of ignorant quacks," but that he really made great progress in the practice of medicine, original

medals of him have, I think, acquired additional interest. The following medal (exhibited at the meeting of the London Numismatic Society on 15 Dec., 1892) appears to be of contemporary, or nearly contemporary work, and as yet I have not come across any published description of it.¹

Obr.—THEOPHRASTVS . PARACELSVS . A° . 1541 .

Half-length figure, facing, of Paracelsus, with his head slightly inclined to the spectator's right hand. The face is without hair and the lines are very harshly expressed. He is dressed in a loose gown fastened by a girdle around the waist. From his neck an amulet (?) is suspended by a thin cord, and in his hands he holds what appears to be the handle of a large, two-handed² sword.

Rev.—Blank.

Lead; 3·1 inches diameter; cast. (Fig. 1.)

The names in full of Paracelsus were Aureolus Philip-pus Theophrastus Bombastes von Hohenheim Paracelsus. Paracelsus³ was an assumed name, and may have been chosen to signify that in knowledge he surpassed the physician Celsus.

He was born at Einsiedeln⁴ in Canton Schwyz, probably in the year 1493. His father was, it is said, Wilhelm Bombast von Hohenheim, a physician in poor circum-

¹ Dr. H. Storer, of Newport, Rhode Island, has very kindly sent me what seems to be a complete list of all the known medals of Paracelsus, together with references to many portraits.

² On the portraits of Paracelsus the handle appears to be too big for any but a two-handed sword, as Dr. Storer, jun., suggested that it was.

³ Others, who deny his noble parentage, think that Paracelsus was a hybrid classical rendering of Höhener or Höchener, which they consider to have been his true name.

⁴ From his birthplace, Einsiedeln, he also called himself "Eremita."

stances, probably the natural son of a German noble of that name.

Paracelsus studied first under his father, but soon took to a wandering life, and is said to have visited France, Spain, Italy, Hungary, the Netherlands, and even England, picking up everywhere what useful information he could. On his return he was made, in 1527, Professor of Medicine at Basel, where his fame became great; and it was about this time that he gave advice to the illustrious Erasmus of Rotterdam.⁵ In 1528, however, when the rich Canon Von Lichtenfels refused to pay his fee, Paracelsus quarrelled with the magistrate because of an adverse judgment, and had to quit Basel.

He then recommenced his wanderings. His last resting-place was Salzburg, where he died in September, 1541, probably from injuries received at the hands of his enemies' servants.

There is some doubt about the precise age of Paracelsus at his death. It has been variously given as forty-five,⁶ forty-seven,⁷ forty-eight,⁸ and even fifty or fifty-one.⁹

⁵ A letter of Paracelsus to Erasmus and the reply of Erasmus are printed in the editions of his collected works. See his works, edited by J. Huser, Basel; quarto vol. iii., 1599, pp. 260 and 261.

⁶ The age forty-five occurs with the date 1541 on a medal described in C. L. Duisburg's edition of C. A. Rudolphi, *Recen-tioris ari numismata virorum de rebus medicis et physicis meri-torum. . . . Danzig, 1862-3, octavo, p. 99, cclxviii.*, No. 2.

⁷ As on a portrait described by Dr. J. S. W. Moehsen, *Verzeichniss einer Sammlung von Bildnissen gröstentheils berühmter Aerzter.* Berlin, 1771, vol. ii. p. 100.

⁸ Another portrait mentioned by Moehsen, *op. cit.*, p. 100. This age is likewise given in the *Universal-Lexicon*, J. H. Zedler, Leipzig and Halle, 1740.

⁹ As the writer in the ninth edition, *Encyclopædia Britan-nica*, gives the year of his birth as 1490, 1491, or 1493, and

For the two latter ages I can find no early support. It seems to be generally agreed that Paracelsus died on the 23rd or 24th September, 1541, and most authorities state that he was born in 1493. If these authorities be correct then his age at death must have been forty-seven or forty-eight, according as he was born before or after September in 1493. This point can, therefore, only be settled if we know the day or month of his birth. If the statement be true that he was born on 17th December, 1493,¹⁰ his age at death must have been forty-seven, and this is confirmed by two portraits dated 1538,¹¹ giving his age as forty-five.

The occurrence of the age forty-five on a medal⁶ bearing the date of his death (1541) may be explained by supposing that the likeness on this medal has been copied from a portrait taken in 1538; for instance, one of the two just mentioned.¹¹ Indeed, medals with similar likenesses¹² exist, giving his age as forty-five, but undated.

Although the present medal seems to differ from other medals of Paracelsus hitherto published, yet the likeness on this and most of the other medals¹³ and known por-

the date of his death as 1541. He makes the age of Paracelsus at death either 51, 50, 49, 48, or 47.

¹⁰ See the article in Brockhaus *Conversations-lexikon*, 18th edition.

¹¹ If these portraits were produced for or after his birthday in December. The two portraits are mentioned by Moehsen, *op. cit.*, vol. ii. p. 100.

¹² See figure in *Trésor de Numismatique*, Paris, folio, the volume with German medals, 1841, Pl. X. No. 7.

¹³ For other medals, see especially Rudolphi, *op. cit.* edition of Duisberg, pp. 99, 100. There are also figures in Franz van Mieris, *Histori der Nederlandsche Vorsten*, Graavenhaage, 1735, folio, vol. iii. p. 44, and Köhler, *Historische Münz-belustigung*, vol. xi., Nürnberg, 1739, 4to, p. 369; also *Trésor de Numismatique*, Paris, folio, 1841; *Médailles Allemandes*, Pl. X. No. 7.

traits¹⁴ are so similar as to suggest that they have been derived by copying the one from the other. To decide which are the original likenesses would demand a careful comparison of the scattered portraits and portrait medallions. One original likeness was probably made in 1538, another may be that attributed to Tintoret.¹⁵

The complete absence of hair on the face in most of these portraits no doubt furnished a pretext for the statements of his enemies that he was a eunuch,¹⁶ with which state-

¹⁴ For portraits of Paracelsus see list given by Moehsen, *op. cit.*, pp. 99—101, and plates in various books, as in that of Professor Thomas Erastus, containing his vigorous attack on the doctrines of Paracelsus, and in the book of *Paracelsus De Urinaram, &c.*, both of which are referred to below. (See figures taken from copies in the British Museum by kind permission of the authorities.)

¹⁵ This portrait is altogether different from the others. The plate is signed "F. Chauveau Sculpsit," "I. Tintoret ad vivum pinxit." It forms the frontispiece to the Latin edition of his works, published at Geneva, 1658, folio.

¹⁶ The story of the castration of the child Paracelsus by a hog may be fitly compared to a similar story about Boileau. This story accounts for Boileau's satires on women by saying that he was a eunuch, owing to an injury received in childhood from a turkey. Hence also his hatred of the Jesuits who introduced turkeys into France!

Cf. also the statement of Paracelsus' bitterest enemy, Thomas Erastus, the physician and theologian, *Disputationum de medicinā et Philippi Paracelsi pars prima*, Basilea (? 1572), p. 298:—"Eunuchum fuisse, cum alia multa, tum facies, indicant et quod, Oporino teste, feminas prorsus despexit." This Thomas Erastus (Liebler or Lieber) was born about 1528, and died at Basel, 1st January, 1583. He was Professor of Medicine at Heidelberg, and afterwards Professor of Ethics at Basel. In his book on excommunication he founded the doctrines called after him, Erastianism. The Oporinus mentioned here was the celebrated book printer at Basel, who lived 1507—1568. Besides being *famulus* to Paracelsus about 1528, he was afterwards, in 1533, made Professor of Latin at Basel, and in 1537—39 was Professor of Greek there.

ment extracts from Paracelsus' own writings¹⁷ seem singularly at variance, as well as the general strength and vigour of his character. Moreover the portrait attributed to Tintoret has moustaches and beard.

The object suspended from the neck of Paracelsus appears to be an amulet, and this must also have lent some support to the assertions of his enemies, that he was unduly superstitious and credulous in amulets.

Another difficulty has been to explain the nature of the object which Paracelsus is represented as holding in his hands. Various suggestions have been offered, but I have little doubt that the usual explanation is correct, namely, that the object held is the handle of the sword, though certainly one of peculiar form for the time.

On some of the portraits one of the cross-guards is represented, and there can be then no doubt of its being a sword-handle.

The object held looks least like a sword-handle in a medal figured in Köhler (*Münz-belustigung*, vol. xi. p. 369), but even here in the text it is described as a sword-handle. Some doubt might arise from the word AZOTH being inscribed on the pommel in the medal figured by Van Mieris.¹⁸ This word "Azoth"¹⁹ was the

¹⁷ As in the introduction to his book *Paragranum*, when he says that "his beard had more experience than all the universities."

¹⁸ Van Mieris, *op. cit.*, vol. iii., p. 44.

¹⁹ For the "Azoth" of Paracelsus and the immense healing power ascribed to it, at any rate by his successors, see E. T. Hessling, *Theophrastus redivivus, illustratus, coronatus et defensus*, Hamburg, 1663, 4to, p. 7. CAPUT II.: "Wie solche Artznoy, azothi, in allen Krankheiten mit Gott glücklichen von Jungen und Alten kan gebraucht werden; und dadurch nechst göttlicher Hülfe Krancken curiret worden sind."

name given to the famous preparation of Paracelsus, which, probably chiefly by his successors, was magnified into a sort of panacea. That here, also, the object held in the hands of Paracelsus is a sword-handle is proved by a plate (Fig. 2) with his portrait which occurs in the work, "De urinarum ac pulsuum judiciis Theophrasti Paracelsi



Fig. 2.

heremitæ utriusque medicinæ doctoris celeberrimi libellus," published at Cologne, 1568. In this plate the cross of the sword is clearly represented, and on the pommel is inscribed the word AZOTH. I think, therefore, that one is justified in regarding the object held by Paracelsus as being in all these cases a sword-handle.

But why should Paracelsus be represented holding a sword of such peculiar form, for two-handed swords were certainly not generally used in his time, even in Switzerland?²⁰ Here again the writings of his bitterest enemies throw some light, seizing as they did on anything they could to interpret it in some way discreditable to him.

The following passages afford an explanation of the sword, and also possibly of the word AZOTH, when it is inscribed on the pommel; the quotations are from the work of Prof. Thomas Erastus against the Paracelsian doctrines, and are in the coarse, abusive method of attack so frequently made use of at the time:—

“Retulit²¹ hæc saepe D. Oporinus,²² ἀξιοπιστώτατος, qui amanuensis ejus fuit per biennium. Idem affirmatè saepè narravit, nunquam nisi benè potum ad mysteria sua explicanda accessisse: et in medio hypocausto columnae τετυφωμένον, adeoque numine suo plenum assistentem, manibus capulo ensis comprehenso (quod ejus κοιλωμα hospitium præberet ei spiritui, qui vitro inclusus responsa fascinatis²³ à se hominibus dare solet), eructare suas imaginationes consuevisse. Superavit inconstantia, impudentia, temeritate, et prodigiosa impietate Arianos,

²⁰ Where their earlier use has been rendered so notorious by Sir Walter Scott's “Anne of Geierstein.”

²¹ Th. Erastus, *op. cit.*, pp. 286 and 287.

²² The same Oporinus, quoted as a witness in the extract already given. Cf. also Andreas Jociscus, *Oratio de ortu, vita, et obitu Johannis Oporini Basiliensis*. Argentorati, 1569, p. 9.

²³ Perhaps the shining glass pommel of his sword was used by Paracelsus to hypnotise patients. For a similar purpose modern hypnotists at Paris use a glittering revolving object, like the instruments used for fascinating larks. This may explain how Paracelsus cured epileptics (hystero-epileptics?) by “magic,” when other doctors failed; for which he is praised by Giordano Bruno.

Photinianos, Mahometanos, Haereticos, denique Tartareos omnes."

Another passage on p. 239:—

"Plerumque enim non nisi ebrius, ad extreum noctem domum ibat cubitum, atque ita, ut erat indutus, adjuncto sibi gladio suo, quem Carnificis cuiusdem fuisse jactabat, in stratum sese conjiciebat: ac saepe media nocte surgens, per cubiculum nudo gladio ita insaniebat, ita crebris ictibus et pavimentum et parietes impetebat ut ego non semel mihi caput iri amputatum metuerem."

It does not seem improbable that the peculiar two-handed sword was properly the sword of an executioner²⁴ (*carnifex*). Was the pommel of the sword really a knob of glass, containing, enclosed in it, some of the "spiritus" spoken of by Erastus, that is the *spiritus vita*, or *quinta essentia*,²⁵ giving the virtue to his medicine "azoth," so much talked of by the successors of Paracelsus?

This would afford an explanation for the inscription AZOTH occurring on the pommel of the sword in the

²⁴ That Paracelsus made the acquaintance of executioners is known, from the following passage quoted by Dr. M. B. Lessing, (*Paracelsus*, Berlin, 1839, p. 59): "I went in search of my art, often incurring danger of life. I have not been ashamed to learn that which seemed most useful to me even from vagabonds, executioners, and barbers. We know that a lover will go a long way to meet the woman he adores; how much more will the lover of wisdom be tempted to go in search of his divine mistress!" — Translation in Dr. Hartmann's *Life of Paracelsus*, London, 1887, p. 18.

²⁵ The *quinta essentia* was the chief *spiritus* of his mystic doctrine of medicine which was supposed to pervade all things in exceedingly small quantities. To this all minerals owed their virtues, and this living beings lost on their death. If it could be extracted and administered as a medicine it would give eternal life and freedom from diseases, *i.e.* would be the "panacea."

medal and the plate already referred to (Fig. 3). (See Melchior Adami in *Vitæ Germanorum Medicorum*, Heidelberg, 1620, p. 35: "Alii illud, quod in capulo habuit, ab ipso Azoth appellatum, medicinam fuisse praestantissimam aut lapidem philosophicum putant.")

The signification in the mystic symbolism of the time might then be, that just as the executioner's sword could destroy malefactors, so the wonderful "azoth" could overcome disease; and, indeed, this explanation is in keeping with the known doctrines of Paracelsus, who almost personified disease, regarding it as something essentially foreign to the organism which entered in to fight with it, and in this he dimly foreshadowed the modern "microbe" doctrine of many diseases.

The medals and portraits of Paracelsus seem to lend some countenance to the assertions of his enemies, who very likely made use of them to support their accusations; and a similar portrait of Paracelsus appears in the book containing the most violent attacks against his doctrines (Fig. 2).²⁶

How far these accusations are true is difficult to say, but the chief witness, Oporinus, was sorry for his conduct after the death of Paracelsus. It is unreasonable to suppose that Paracelsus was quite free from the prevailing superstitions of his time.²⁷ Arrogant he certainly was, possibly from the conviction of his own superiority over his contemporaries, but it remains certain that he made great

²⁶ Th. Erastus, *op. cit.*

²⁷ Thus alchemy and astrology constitute the chief part of two out of his four "columnæ" of medical science. See *Paragranum*—a book, however, whose authenticity is not altogether free from doubt.

advances in the practice of medicine. He encouraged the use of preparations of mercury, iron, arsenic, and antimony, as well as of tincture of opium,²⁸ all of which



Fig. 3.

have been found of great use in medicine; he wrote on

²⁸ Still known as laudanum, the name given to it by Paracelsus, if, indeed, what Paracelsus called "laudanum" was not quite a different preparation to the modern laudanum.

Pfäffers²⁹ and other baths³⁰ as health resorts; but, perhaps chief of all, he laid due stress on the tendency to spontaneous recovery from disease,³¹ the "*vis medicatrix naturæ*," representing the use of medicine as an ally to help man in battling against disease.

F. P. WEBER.

²⁹ See *Von dem Bad Pfeffers*, Strassburg, 1571, 8vo; with a preface by Dr. Michael Toxites.

³⁰ See *Badenfart Büchlein*, Franckfurt am Mayn, 1566, 8vo.

³¹ Of quite equal importance was his insistence on the natural process by which wounds heal.

NOTICES OF RECENT NUMISMATIC PUBLICATIONS.

Kunsthistorische Sammlungen des allerhöchsten Kaiserhauses
—*Beschreibung der altgriechischen Münzen*, Band I. *Thessalien*
—*Epeiros*, von J. von Schlosser. Vienna, 1893.

This first volume of a Catalogue of the Greek coins in the Vienna Cabinet is modelled, like the Berlin Catalogue, upon that of the British Museum, with which it is well worthy of comparison. The descriptions of the coins are, so far as I have tested them, no less scientific than accurate. The indications of provenance, as well as the references to works in which many of the specimens have been already published, given in separate columns, are useful additions and distinct improvements.

In Thessalian coins the Vienna collection will not stand comparison with that of our own Museum, though it possesses some rarities not included in the British Catalogue. Among these are two extremely rare bronze coins of Homolium of the third century B.C., *obv.* head of Philoketes (?) *rev.* **ΟΜΟΛΙΕΩΝ** coiled serpent; and an equally rare coin of Mopsium, of the fourth century B.C., which differs from the otherwise identical specimen described in my *Historia Numorum*, p. 257, in that the reverse legend is **ΜΟΥΕΑΤΩΝ** instead of **ΜΟΥΕΙΩΝ**. Another coin unrepresented in our own Museum is one of Teisiphonus, tyrant of Pherae, B.C. 357—352. Unfortunately it is in poor condition, and the inscription **ΤΕΙΣΙΦΟΝΟΥ** cannot be read. It seems, however, to be identical with the specimen engraved in the *Revue Numismatique*, 1853, Pl. XIV. 10. (*Hist. Num.*, p. 261.)

If in the Thessalian series the Vienna collection is inferior to our own, on the other hand, in the Illyrian and Dalmatian it is remarkably rich. Thus it can boast of 147 coins of Apollonia, against 92 in the British Museum, and of as many as 348 coins of Dyrrachium against 225 in the English Cabinet. Among the rarities are 4 coins of Scodra, 2 of the Daorsi, and 2 of King Genthius, similar to those published by Mr. Arthur J. Evans in the *Numismatic Chronicle*, 1880, Pl. XIII. 6, 7.

As in the British Museum Catalogue, the coins are arranged in successive historical periods, the dates, whether certain or conjectural, being prefixed to each; a plan far preferable to that which has unfortunately been adopted in the Berlin Catalogue, in which, as a rule, no chronological indications whatever are supplied in the case of the autonomous coins.

The work is provided with useful and ample indexes, and the plates, five in number, are well executed. It is to be regretted, however, that there are not more of them.

The *Revue Numismatique*, Part IV., 1892, contains the following articles:—

1. VILLARET (E.). Japanese Numismatics. Conclusion; illustrated by nine plates.

2. BABELON (E.). The coins of the Satraps in the Persian empire under the Achaemenidae.

In this article the writer deals with the Satrapies of Ionia, Lydia, Phrygia, and Cappadocia. Among the Satrapal coins of Ionia, &c., M. Babelon discusses the rare, but frequently published, tetradrachms bearing on the obverse the royal Persian archer, and the names ΠΥΘΑΓΟΡΗΣ and ΔΗ A highly probable explanation of these two names he here gives for the first time. The writer owes it to M. Six, who suggests that they are merely chief magistrates of Ephesus requisitioned by Memnon the Rhodian, who held Ephesus for the Persians B.C. 380—334, to provide money for the payment of his troops. The specimens without magistrates' names may have been struck under similar conditions, though at other cities, e.g., Miletus or Halicarnassus, which Memnon also occupied.

The tetradrachms, &c., bearing the head of the Satrap Tisaphernes (?), and on the reverse ΒΑΣΙΛΕΩΣ, ΒΑΣΙΛ, ΒΑΣΙ, or ΒΑ, M. Babelon divides into two groups: (i.) Rev., King as archer, in incuse square; (ii.) Rev., lyre. The first of these groups he believes to have been struck at Aspendus, B.C. 411; the second at Iasus, in Caria, B.C. 395.

The rare tetradrachm of Pharnabazus (*Hist. Num.*, p. 453) M. Babelon rightly, as I think, attributes to Cyzicus, notwithstanding M. Six's proposal to ascribe it to Caunus, in Caria (*Num. Chron.*, 1890, p. 256). It was probably struck on the occasion of the occupation of Cyzicus by Pharnabazus and the Spartan admiral Mindarus, in B.C. 410.

To the well-known series of Cilician staters of Pharnabazus with inscriptions in the Aramaic character M. Babelon adds a new and important variety. *Olv.*, פָרְנַבָּזָז (Pharnabazus); helmeted head of Ares. *Rev.*, ΝΑΓΙΔΙΚΟΝ; Aphrodite seated r. on throne, flanked by two sphinxes. This coin, like the other Cilician issues of Pharnabazus, was struck between B.C. 878 and 378.

M. Babelon next deals with the coins of Orontas, and gives cogent reasons for his conclusion that their issue was restricted mainly to Lampsacus and Clazomenae, no coins having hitherto been discovered which can be assigned to Cilician mints, not-

withstanding the fact that Orontas was commissioned by the King of Persia, in conjunction with Tiribazus, to conduct the campaign from Cilicia against Evagoras of Salamis. The coins of his colleague Tiribazus, on the contrary, were undoubtedly struck at the Cilician ports Issus, Mallus, Soli, and Tarsus, and perhaps at Nagidus.

M. Babelon concludes his most able and interesting article by reiterating his opinion that the coins of Sinope with the Aramaic inscription, which on the specimen lately acquired by the British Museum can only be read *Abdsasan*, are in reality coins of *Abrocomas*. In reading the name thus, he is supported by the weighty authority of M. Six. I may add, however, that M. Waddington, who has carefully examined the specimen in the British Museum, and who possesses an equally perfect piece in his own cabinet, now agrees with me that *Abdsasan* is the only possible reading. The two letters concerning which M. Babelon and I are at variance are certainly identical, and both of them *Samekh* (see *Num. Chron.*, 1892, p. 258).

3. ROUYER (J.). *Theophraste Renaudot*. A biographical rectification concerning a jeton bearing a bust of Renaudot, together with a description of some other Parisian jetons (conclusion).

4. LA TOUR (H. DE). Modern medals recently acquired by the Bibliothèque Nationale.

The *Zeitschrift für Numismatik*, Parts III. and IV., 1892, contains the following articles :—

1. A. von SALLET. The Acquisitions of the Royal Coin Cabinet of Berlin, April, 1889—April, 1890. The additions to the German Cabinet during the above-mentioned period were less numerous than usual—88 Greek coins, 17 Roman, 29 Oriental, and 466 Medieval.

Dr. von Sallet begins his paper with an attempt to rehabilitate the coin with the inscription **AEPMHNAO**, the authenticity of which has been disputed by M. Svoronos in the *Ἐφημερίς Ἀρχ.* 1890, p. 159. As I have already discussed this coin in the pages of the *Numismatic Chronicle*, 1890, p. 278, and 1891, p. 110, I have only to add now that Dr. von Sallet's arguments do not appear to me convincing. My conviction that the Berlin coin is not authentic is also confirmed by the fact that an unmistakably modern forgery of a tetradrachm of Terone has been recently offered by a Constantinople dealer to the British Museum, a cast of which now lies before me. On the obverse is a rudely executed amphora from the mouth of which hang two bunches of grapes, and on either side the letters **T—E** twice repeated, in imitation of a double striking.

The reverse of this coin is an incuse square diagonally divided by broad bands. The lumps of metal and every little detail in the divisions of the incuse square on this undoubted forgery are identical with those on the Berlin coin of Aermenaos. *The two reverses are from one and the same die.* This fact, it seems to me, should settle the question once for all.

Dr. von Sallet's new explanation of the reverse type of the rare silver stater of Zacynthus (*Hist. Num.* p. 360) is probably correct. He draws attention to the fact that the infant between the two serpents is not strangling them, but fondling one of them. He is therefore not the infant Herakles, but the infant Asklepios, who, as we gather from another stater of Zacynthus (*Hist. Num.* p. 359), was worshipped there.

Among the other more notable additions to the collection are two silver coins of the Sassanian Queen Borane, a bronze coin of Achulla in Africa, bearing the portrait of P. Quintilius Varus, the Proconsul, a rare gold coin of Chaleb, son of Thesena, King of Axum, *circ.* 522 A.D., Roman aurei of Cn. Domitius Abenobarbus, and of the Emperors Laelianus and Nigrinius.

2. WUNDERLICH (E.). On the Remlin Find (1890). Mediæval German coins of the fourteenth and fifteenth centuries.

3. HAMBURGER (L.). The silver coinages of the last revolt of the Jews against Rome. This paper marks an epoch in the study of Jewish numismatics. The writer has little by little got into his own hands a large portion of a very important find of denarii and tetradrachms hitherto attributed in part to the first and in part to the second revolt of the Jews against Rome. The first of these revolts, it will be remembered, took place between the years 66 and 70 A.D., closing with the famous siege and capture of Jernsalem by the Emperor Titus. The second and last revolt occurred sixty-five years later, in the reign of Hadrian, A.D. 132—135. The find now under consideration consisted of about two hundred to three hundred and fifty denarii and of forty-six tetradrachms. The writer points out that the types of these coins are so closely intermingled with one another, and that the obverse and reverse dies of the various series were so frequently interchanged, that there can be no longer any doubt that they all belong to one and the same period, viz., to the second revolt under Barcochab. To the first revolt, in the time of Nero, thus deprived of the coins hitherto assigned to it, may now, I think, safely be attributed the shekels and half-shekels of years 1—5, which have been generally ascribed to Simon Maccabæus, although Ewald (*Götting.-Nachrichten*, 1855, and more recently, Reinach (*Les Monnaies juives*, 1888) had already conjectured, what will probably turn out to be correct, that

they were in reality issued during the first revolt. It should be stated, however, that M. Hamburger, though he is evidently strongly inclined to accept the attribution originally proposed by Ewald, leaves this question still open (p. 828). This important article will no doubt receive the attention it deserves from all who have made the history of the Jewish coinage their special study.

BARCLAY V. HEAD.

MISCELLANEA.

ARABIC, ETC., COINS.—A few silver coins of the Ayyubi dynasty have come into my possession, four of which are not included in the British Museum Oriental Catalogue (Vol. IV.), and are, so far as I can find, unpublished.

1. En Násir Yoosuf.

Hexagram type.

Halab, year (6)5x.

Obv. area within triple hexagram

ابو بالله
الامام المستنصر
امير المؤمنين
احمد

Margin illegible.

Rev. area (as obv.) as B. M. IV. 331.

Margin ضرب بحلب . . . خمسين

2. Es Sálih Ayyoob.

Mint and date obliterated, but before 640.

Obv. area within double square, plain and dotted

الامام المستنصر
بالله ابو جعفر
المنصور امير المؤمنين

Margin in segments between square and outer circle

لَا إِلَهَ إِلَّا

etc.

Rev. area (as obv.)

الملك صالح
مجم الدنيا والدين
أيوب بن محمد

Margin (as obv.)

3. Mint obliterated, year (6)45.

Obv. area within double square, plain and dotted

الامام
المستعصم
بالله ابو احمد
امير المؤمنين

Margin لا اله الا

Rev. area (as obv.)

الملك صالح
مجم الدنيا وا
لدين ايوب بن محمد

Margin

4. Es Sálih Ismael.

Damascus, year 642.

Obv. area within double square, plain and dotted

الامام
المستعصم
بالله ابو احمد
امير المؤمنين

Margin in segments between square and outer circle

(لا اله الا الله وحده محمد رسول الله)

Rev. area (as obv.) as B. M. IV. 433.

بسم الله ضرب بدمشق سنة اثنى اربعين ()
وستمائة

I have also an Othmánli gold piece of Selim II., Algiers,
year 974.

Obv. and rev. (except mint) nearly as B.M. VII. 231.

which is earlier than any of this mint in the B.M., excepting the silver pieces, Nos. 218 and 219, and the copper, No. 220, of the preceding Sultan Soliman. None earlier than his reign seem to be published, and Marsden, i. 388, after mentioning the existence of some small square pieces of the reign of Soliman struck at Algiers and other places on the coast of Barbary, adds that they are probably the earliest specimens from those mints which have occurred. Yet there seems reason to suppose that coin must have been struck there by Soliman's predecessor, Selim I., if a statement contained in the *Ghazouât Khair ed-din*¹ and repeated in the *Zohrat el-Nayerat*² be accurate. The former work is an Arabic translation of an autobiography dictated in Turkish by Khair ed-din, the second Dey of Algiers, in person by order of the Sultan Soliman; the latter written in 1780 by a native of Tlemcen, is a narrative of the attacks made by Christian powers on Algiers between the establishment of the first Dey there in 1516, and O'Reilly's expedition in 1775. This is said to be, down to the year 1541, almost a verbatim transcript of *Ghazouât*³. Both works state that soon after the death of the first Dey in 1518 Khair ed-din announced his resolution of placing his dominion under the protection of Sultan Selim, the terms being that in return for money and material of war the Sultan's claims were to be limited to the privileges of the Khutbey and Sikkey, i.e., of being prayed for in the Friday prayers in the Mosques, and of inscribing his name on the currency; that the terms were accepted, and Khair ed-din invested with the title of Amir in the name of Selim Khan, in whose name various coinages were thenceforth struck by Khair ed-din. See *Ghazouât*,⁴

¹ French translation under title of "Fondation de la Régence d'Alger," by Sander Rang and Denis. Paris, 1837.

² French translation by Alph. Rousseau under title of "Chroniques de la Régence." Paris, 1841.

³ See *Le Pégnon d'Alger ou les origines du gouvernement Turc en Algérie*, by Adr. Berbrugger, at page 10. Alger, 1860.

⁴ In an Arabic MS. of the *Ghazouât* in the B. M., No. 3,270, entitled "Sirat Khaireddin Pachu," the text of this passage is as follows:—(fol. 24) that the Sultans envoys to the Algerians اعلموا انه قبل طاعة اهل الجزائر و اذن لهم في صرف الخطبة والسلكة اليه كما تخمنه الكتاب الذي وجهه معهم واستقر خير الدين اميرا بالجزائر من قبل السلطان العظيم سليم خان و صرف دعوتها و امر بذكرا على منابرها و نصب السلقة عليه.

Chap. XI., and Zohrat, Chap. VII. Selim reigned until A.H. 926=A.D. 1520, and as the privilego of minting was especially cherished by Eastern Sovereigns and constituted in this case a large part of Selim's prerogative, it is reasonable to suppose that it was exercised, as stated in the above works.

H. F. AMEDROZ.

THE NEW MEDAL ROOM IN THE BRITISH MUSEUM.—The entire collection of coins and medals in the British Museum, which now consists of nearly a quarter of a million of specimens, and which, taking it as a whole, is probably the finest collection in the world, having outgrown the space available for its accommodation in the old Medal Room constructed fifty years ago, has been just removed into a new wing of the Museum specially built to receive it.

The new Medal Room is on the western side of the Museum. It is about double the size of the old room, and is well lighted by three windows with a southern aspect. In the new department there is increased accommodation for students, as well as ample space in an upper storey for extending the collection in the future. The approach is from the Etruscan Saloon, and on either side of the entrance Dr. Barclay Head, who has recently succeeded Prof. R. S. Poole as Keeper of the department, is arranging an exhibition of Greek and Roman coins. Attached to the new room is a long though somewhat narrow gallery, in which Dr. Head proposes to exhibit to the public a splendid selection of medals, both artistic and historical, as well as a fine series of English coins, ranging from the earliest times down to our own day. This, however, will be a work of time, and the exhibition room will probably not be thrown open to the public until next year. Meanwhile it is to be feared that this work, and the reorganization of the collections in their new home, will unavoidably cause some delay in the publication of the catalogues, for which the officers and assistants in the coin department have obtained throughout Europe, and we may also add in India, so well deserved a reputation.

The series of coins on the left side of the entrance, at present exhibited to the public, consists of a selection of the finest ancient Greek coins, with those of some of the nations in close relations with the Greeks, arranged in such a manner as to afford a synoptical view, at once historical and geographical, of the gold and silver coinage of the ancient world, from the invention of the art of coining money early in the seventh century B.C. down to the Christian era. This series is divided into

seven *historical* compartments, embracing the principal coins current during the following periods:—I. B.C. 700—480; II. B.C. 480—400; III. B.C. 400—336; IV. B.C. 336—280; V. B.C. 280—190; VI. B.C. 190—100; VII. B.C. 100 to the Christian era. Each of these compartments is divided horizontally into three *geographical* sections, the upper one (*a*) containing the coins of Asia Minor, Phœnicia, Syria, &c.; the middle one (*b*) those of Northern and Central Greece, Peloponnesus, Crete, and the islands of the Aegaeæn Sea; and the lowest one (*c*) those of Italy, Sicily, the southern shores of the Mediterranean, and Western Europe. Each of the seven historical compartments thns offers, in its three geographical sections, a complete view of the coins current throughout the civilised world during that particular century or period; the whole forming a series of historically successive *tableaux*. The individual specimens are separately labelled and numbered in each of the twenty-one divisions, the numbers referring to Dr. Head's *Guide to the Coins of the Ancients*, where full descriptions and explanations are given, together with seventy beautifully-executed autotype plates, on which every specimen is accurately reproduced.

On the right side of the entrance is a selection of Roman coins, consisting (1st) of a rich series of gold Roman and Byzantine aurei and solidi, ranging from the time of Julius Cæsar down to the fall of Constantinople, the capital of the Eastern Empire, in A.D. 1453; (2nd) of a series of silver denarii, &c., of Republican times, classified alphabetically under the gentile or family names of the monetarii, the dates of issue being added on the labels under each specimen; (3rd) of "Aes grave," and (4th) of Imperial large brass coins, among which may be seen some of the finest specimens from the unrivalled collection formed by the late Mr. Edward Wigan. Some of these sections are not yet actually in position, but will be on exhibition in the course of a few weeks.—ED.

VIII.

RARE GREEK COINS.

(See Plate VII.)

I PROPOSE in the present paper to give an account, illustrated by the autotype process, of some coins lately added to my collection, which, on account of their novelty or for other reasons, seem to merit being put on record. The series comprises several new electrum staters of Cyzicus and gold staters of Lampsacus, with two electrum hectæ, as well as some silver coins. In their arrangement the geographical order adopted by Eckhel, and continued by Mr. Head in his *Historia Numorum*, is followed, except in the case of the electrum and gold coins which are described first.

CYZICUS.

1. *Obv.*—Naked male figure kneeling l. and looking back. His r. hand is placed on his chest, and with his l. he appears to be beckoning. Beneath, tunny, l.

Rev.—Mill-sail incuse; plain surface.

(Pl. VII. 1.) EL. 245·3 grs.

This coin forms an addition to the already long series of the electrum coinage of Cyzicus. It belongs to the best period of the monetary art of that state, and both in design and execution is worthy of that period.

The subject, like so many others on the staters of

Cyzicus, remains at present unexplained. It forms no part of any recognised myth, nor does it appear to refer to any known event of traditional or authentic history.

The figure has the appearance of having something like a calathus on the head. This is, however, probably due to a flaw in the die, and is not the representation of a head-dress.

2. *Obv.*—Naked bearded figure kneeling l., holds a tunny by the tail in his r. hand.

Rev.—Mill-sail incuse; plain surface.

(Pl. VII. 2.) EL. 249.3 grs.

This stater, one of a small hoard of coins which are all of an early period, and which contained staters and hectæ of Cyzicus, and some draohms of Chios, was found not long since in that island. The stater of this type was first published in the *Num. Chron.* N.S. vol. xvii. Pl. IV. 4, but the sixth and twelfth are engraved (Pl. V. 10, 11) in Sestini's *Stateri Antichi*. It is here reproduced on account of its fine state of preservation, and because it is of a different die from that already represented.

3. *Obv.*—Gorgon head, full-face. Beneath, tunny l.

Rev.—Mill-sail incuse; granulated surface.

(Pl. VII. 3.) EL. 244.1 grs.

This is a later coin than the stater of the same type from the Chios find, first published by Mr. Montagu in *Num. Chron.* 3rd Ser., vol. xii. Pl. III. 2, and of which another specimen from the same find, but from a different die, is here figured (Pl. VII. 4) for comparison with the later coin. The representation of the Gorgoneion on this coin is more human and pleasing than is usual, though it closely resembles that on some other coins, e.g., those of Parium. The type is a very frequent one, as well on coins





of several places in Asia Minor as on those of other Hellenic states. The reader may be referred to a very exhaustive essay, *De Gorgone*, by Mr. Jan Six, Amsterdam, 1885.

This appears to be the only instance on the staters of Cyzicus of the recurrence at a later time of a type already adopted. There are numerous examples of the same type being produced from different dies, but in these cases all the coins were struck about the same time, probably in the same year.

4. *Obr.*—Boar's head r., holding a tunny upwards between its jaws.

Rev.—Square incuse, divided into four parts by two bars.
(Pl. VII. 5.) EL. 248·8 grs.

This coin, of a type hitherto unknown on the Cyzicene staters, was found in the island of Chios, but it did not, so far as I know, form one of the find already referred to. It belongs to the earliest period of the great electrum series, and exhibits on the reverse an incuse which varies materially from the ordinary mill-sail pattern of the staters.

A very similar type, but on a silver coin and without the tunny, occurred among a hoard of coins found many years ago (1821) in the island of Santorin. It is engraved in the *Num. Chron.* 3rd Ser. vol. iv. Pl. XII. 9, in the account of the find by Mr. Wroth. The boar's head is frequent on the coins of Lyttus, and occurs also on a small coin, many specimens of which were in the Santorin hoard, *i.e.* Pl. XII. 10, 11, attributed, but not on sufficient grounds, to Lycia. An electrum coin, 10 grs., which has a boar's head on the obverse, was published by Prokesch-Osten, *Inedita*, 1854.

5. *Obr.*—Winged tunny l.

Rev.—Mill-sail incuse; plain surface.

(Pl. VII. 6.) EL. 248.3 grs.

This curious stater, at present, I believe, unique, belongs also to the earlier coinage of Cyzicus, being of a time probably not later than B.C. 500. The type cannot be explained, unless, indeed, it may be considered as a solar emblem, representing, like the wheel, the motion of the sun. Winged creatures, men, lions, horses, oxen, dogs, and boars, all occur upon the staters, and it is therefore less surprising that the badge or "arms" of the state should here appear provided with the appendage of a wing.

The "twelfth" in the collection of the British Museum (*Cat.*, "Mysia," p. 20, No. 15), which was published in my *Electrum Coinage of Cyzicus*, p. 122, No. 160, Pl. VI. 23, and there described as a pecten shell, is really a winged tunny, the wing having been mistaken for a shell, to which on the coin it has some resemblance.

LAMPSACUS.

1. *Obr.*—Male bearded head l., wearing stephane. Behind the neck, the head of a club.

Rev.—Fore-part of winged horse r.

(Pl. VII. 7.) N. 129.1 grs.

This at present unique coin is one of the later staters of Lampsacus, and was probably not struck before the middle of the fourth century. Like many of the staters of about the same time, which have a male or female head for type, it is not equal, either in design or execution, to the coins of an earlier issue which also have a head upon them, and is much inferior to those also earlier which have a subject for the type.

It possesses, however, a value apart from its artistic qualities, and forms an unusual and very interesting variety in the representation of the head of Herakles. The god is here portrayed wearing the head-dress of Omphale, provided, however, with his own characteristic club. He assumes the dimorphous aspect not inconsistent with his attributes. A hecté of Phocæa (*Brit. Mus. Cat., Ionia*, p. 211, Pl. V. 8) supplies a counterpart to this stater, where a head of Omphale appears wearing a necklace and the lion's scalp, with the top of the club of Herakles projecting behind the neck.

2. *Obr.*—Male bearded head l., wearing a wreath of ivy-leaves, with a bunch of berries over the forehead.

Rev.—Fore-part of winged horse r.

(Pl. VII. 8.) *N.* 129 grs.

This head of Dionysos, though inferior in treatment, has a resemblance to the noble head of the god found on some of the tetradrachms of Thasos, perhaps the grandest representation of a head upon any Greek coin. The vigorous manner in which the ivy wreath is rendered on the coins of Thasos is to some extent carried out on this stater, and though the Lampsacene coin is later in date, it may well have been copied from the coin of Thasos. A similar head—but more delicately, if not so broadly, treated—is found on a stater of Lampsaeus, of the same issue as this coin, in the collection of Dr. Weber.

3. *Obr.*—Female head l., wearing round earring and necklace, and crested helmet ornamented with three olive-leaves in front and a floral pattern at the back.

Rev.—Fore-part of winged horse r.

(Pl. VII. 9.) *N.* 129·6 grs.

The head of Athena on this at present unique stater is an exact copy of that on the tetradrachms of Athens figured on Pl. V., Nos. 3—7, of Head's *Cat. of Coins of Attica, &c.*, in the British Museum, which may be attributed to the early part of the fourth century B.C. It is an instance, and not the only one among the Lampsacene staters, of the practice, so common on the staters of its neighbour Cyzicus, of a city copying the coin types of other places for use on its own coins.

UNCERTAIN.

1. *Obv.*—Lion's head, facing.

Rev.—Oblong incuse, divided into two parts, containing irregular markings.

(Pl. VII. 10.) EL. 85.8 grs.

An electrum hectê, of the Phœnician standard, of the same issue as the stater, 219.5 grs., which has two lions' heads facing, in opposite directions, engraved in *Cat. of the Coins of Ionia* (Pl. I. 1) in the British Museum, and attributed by Mr. Head, conjecturally, to Miletus or Sardes. A similar hectê, 36 grs., in the Munich collection, is engraved, but very badly, in Sestini's *Stateri Antichi*, Pl. IX. 18. A tritê, 72.7 grs., of the same issue, is engraved in the *Num. Chron.*, 3rd Ser., vol. ii. Pl. VIII. 2, from the Paris collection, and another, 71.8 grs., from M. Waddington's collection, is noted by Prof. Gardner in the same paper.

The lion's face on all these coins—stater, tritê, and hectê—is precisely alike, and in each case the die was probably engraved by the same hand.

2. *Obv.*—Lion, with open mouth, seated l., the r. fore-paw raised.

Rev.—Mill-sail incuse, roughly formed.

(Pl. VII. 11.) EL. 32.6 grs.

A hectê of the Phœnician standard, though rather light in weight.

It is difficult to suggest any place of mintage for this coin. The type is not an uncommon one, and a similar representation occurs on staters and hectœ of Cyzicus and on a hectê of Phœcœa.

ABDERA.

Obv.—Griffin, with pointed wing, rearing l. ; above it, a naked male figure, holding a wreath in each hand ; beneath, an olive spray. Circle of dots.

Rev.—ΕΠ ΗΓ ΗΣΙΠΠΟ around a quadripartite linear square. All in shallow square incuse.

(Pl. VII. 12.) *AR.* 228.8 grs.

A tetradrachm similar to the one described in the Berlin Catalogue, vol. i., p. 101, No. 33. It is one of the long series of the coins of Abdera, which in number and variety of type almost rivals that of Cyzicus. It belongs to the issue of coins of the Phœnician standard struck about 450 B.C.

IULIS, CEOS.

Obv.—Large bunch of grapes with a small one in field to l. ; to r., a dolphin, downwards.

Rev.—Square incuse, divided diagonally into four parts.

(Pl. VII. 13.) *AR.* 189.2 grs.

Until the sale of the collection of Photiades Pacha, when a similar coin, 183 grs., formed lot 1371, engraved on Pl. VII., no didrachm of Iulis of this type was known, though similar coins of smaller denominations are not infrequent. These coins were formerly attributed to Carthœa, but have been assigned by Dr. Imhoof-Blumer (*Griechische Münzen*, p. 15, *sqq.*) to Iulis in the same island

of Ceos. Didrachms and other coins of Carthaea, also of the Æginetic standard, having for type an amphora in some cases associated with a dolphin, are well known.

COLCHIS (?)

Obv.—Lion, with open mouth, crouching r., the head turned back.

Rev.—Naked human figure, female (?), with the head of an ox or cow, and wearing a collar round the neck, kneeling r. The r. hand is outstretched, and seems to point with the forefinger, there being, apparently, an armlet on the wrist. All within an oblong incuse.

(Pl. VII. 14.) $\text{R. } 121\cdot5$ grs.

A somewhat similar coin, but weighing 154.9 grs., is in the collection of the British Museum (engraved *Num. Chron.*, N. S., vol. ix., Pl. VI. 5). The lion is there crouching left, and the human figure, which kneels on the right knee—the left leg being bent—has both arms visible and outstretched, and ending, apparently, in animal paws. Another coin, now in the Berlin collection, weighing 156.5 grs., was published by Prokesch-Osten, *Num. Zeit.* for 1870, Pl. XI. 4. The figure there has both arms visible, but the right one hangs down the side.

This remarkable coin appears to be of base silver, and, in that respect, agrees with some small coins which have a human head on the obverse and a bull's head on the reverse, and which, on account of their being usually found in the modern province of Mingrelia, are attributed to Colchis. The coin here described was found many years ago in the same province, where also I have reason to believe the two other coins noticed above were discovered. They may, therefore, provisionally, though the

attribution does not appear to be quite certain, be assigned to Colchis.

It would be rash to attempt any explanation of the subject, which most likely has its origin in some local cult.

TENEDOS.

Obv.—Bifrontal head; male, bearded, to l.; female, wearing round earring, to r. Hair represented by dots.

Rev.—Bipennis. In field to r., amphora. **TE NE ΔΕΟ Ν** within linear square. All in square incuse.

(Pl. VII. 15.) **AR.** 239 grs.

In Dr. Weber's collection is another specimen found with this, and struck from the same dies, weighing 239.5 grs.

This coin has upon it the ordinary types of the island, which lasted without variation for more than three hundred years. No archaic coins of Tenedos have hitherto been noticed of the high weight of these. One of about the same date in the British Museum, engraved in Head's *Coins of the Ancients*, Pl. II. 19, weighs 138 grs., and another of the same period, also in the British Museum, weighs 125 grs. It will be observed that the engraver of the reverse die has made the mistake of cutting an **E** in place of an **I**, which he appears to have tried to remedy, not, however, very successfully.

METHYMNA.

1. *Obv.*—Boar walking, r. **ΜΑΘΥΜΝΑΙΟΞ.**

Rev.—Head of Athena r., wearing crested helmet, ornamented, and with a projection in front, and beyond that a dot; within a dotted linear square; all in square incuse.

(Pl. VII. 16.) **AR.** 126.4 grs.

This specimen is one of several similar, or nearly similar, coins of Methymna, which were found, together with a number of smaller coins possibly also of Methymna, not long ago in the island of Lesbos. The other coins of Methymna of the same denomination, are identical with that figured in Head's *Coins of the Ancients*, Pl. II. 27, which has the fore-part of Pegasos in front of the helmet, and the legend repeated on the reverse. I possess a coin from the same find and from the same dies as that now under notice, but which has the legend repeated (*i.e.* subsequently added to the die) on the reverse. In the case of all the coins I have seen of both types, both obverse and reverse are struck from the same dies. The smaller coins are of the types—

2. *Obv.*—Hoplite, wearing crested helmet, and armed with round shield, cuirass, and spear, kneeling 1.

Rev.—Rider, on fore-part of horse, galloping r., within dotted linear square; all in square incuse.

R. 48, 42.9 grs.

3. *Obv.*—Gorgon head.

Rev.—Head of Athena 1., wearing plain helmet, within dotted linear square; all in square incuse.

R. 20.8, 19.7 grs.²

The coin here represented was first published by Mionnet, vol. iii. p. 38, No. 43, Pl. LVI. 1, and lately by Mr. Montagu in the *Numismatic Chronicle*. I have thought it desirable to reproduce it here on account of the peculiar addition to the helmet which is found upon it. What that projection may represent it is difficult to say, but a

¹ Engraved *Num. Chron.*, 3rd Ser., vol. xii., Pl. III. 5.

² Engraved *l.c.*, Pl. III. 6.

very similar object occurs upon helmets on painted vases and sarcophagi of early (sixth century) Ionian origin. Upon a fragment of a very early vase discovered by Schliemann in a grave at Mykenæ, are warriors wearing helmets which have a projection much like that on this coin, but simpler in form.³ They have been explained as representing boars' tusks, a not unlikely adjunct to a helmet in early times. The fore-part of Pegasos and this enigmatical projection, both occurring on coins of the same issue, may both have been developed from the same original.

Mr. Montagu, in the paper noticed above, suggests that the two smaller coins should be attributed to Methymna, and draws attention to the similar style of work, and particularly to the occurrence on the three types of the dotted linear square within the square incuse. The fact that many examples of all the three types, and that no other coins occurred in the hoard, seems also to favour the attribution, to which there does not appear to be any reasonable objection.

CYRENE.

1. *Obv.*—Bearded male head l., with ears and horn of bull; behind it, a silphium seed.

Rev.—A floral stellar device, in square incuse.

(Pl. VII. 17.) AR. 64·1 grs.

A somewhat similar coin in the British Museum, 64·4 grs., is described by Müller, *Les Monnaies de l'Ancienne Afrique*, Suppl., p. 2, No. xx. 6, Pl. I. 4. He also describes one in the French collection, *l. c.* p. 2, No. 20 a. There is an appearance behind the head of an object like a club,

³ Schliemann, *Mycenæ*, p. 153.

and if that does exist, the head is possibly that of Achelous, but the object in question is more likely to be only the dotted edging where the neck is cut off.

2. *Obv.*—Lion's head, facing ; above it, a silphium seed.

Rev.—Head of griffin r., within a dotted linear square ; all in square incuse.

(Pl. VII. 18.) AR. 66.5 grs.

This type is referred to in Mr. Head's *Historia Numorum*, p. 728. The head of a lion is found on several of the coins of Cyrene, and the griffin's head, in connection with Apollo, might naturally be looked for on the coinage of a state so intimately associated with the god of the Dorians, as the *ἀρχιγέτης* of the colonists and the *οἰκιστής* of the State.

W. GREENWELL.

ΑΡΔΟΧΡΟ Ρεβεσ

KANISHKA



ΟΚΡΟ Ρεβεσ

VASU-DEVA



KANISHKA

SHĀKA



GADAHARA

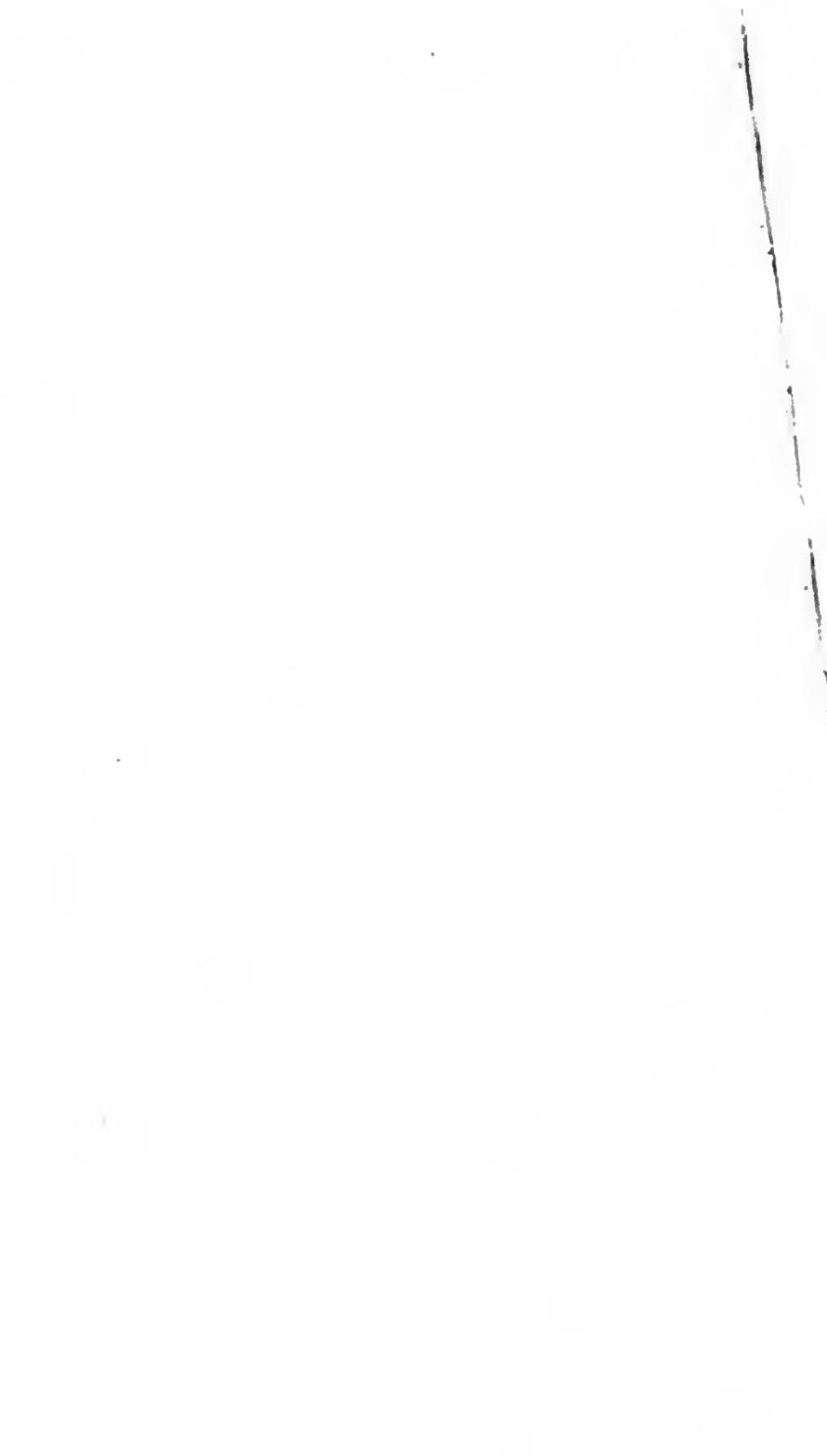


GADAKHARA



PAKANDHI





GREAT KUSHANS

3



PORTRAITS FROM SEALS & COINS (ENLARGED).

AUTOTYPE

INDO-SCYTHIC GREEK ALPHABET.

A	Δ	Δ	Δ	Δ	Ω	Ο	I	I	I	P	P
B	Β	Β					K	K	K	Σ	Ϲ
Γ	Γ	Γ					Λ	Λ	Λ	Τ	Τ
Δ	Δ	Δ	Δ	Δ	Δ	Χ	Μ	Μ	Μ	Υ	Υ
Ε							Ν	Ν	Η	Ν	Ϝ
F							Ξ			Φ	Φ
Z	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	Ο	Ο	Ο	Χ	
Η	Η	Η	Η	Η	Η	Η	Π			Ψ	
Θ	Θ	Θ					Ω			Π	Ρ



IX.

LATER INDO-SCYTHIANS.

(See Plates VIII.—X.)

INTRODUCTION.

THE earliest immigrations which have left any permanent traces in India were made from the north-east by the Dravidians, who occupied Southern India; and from the north-west by the Brahūis, who occupied the country on the Lower Indus. They were followed by the Aryas, who overran all Northern India, and introduced the Brahmanical religion, which still exists, though in a much altered form.

The Persian invasions of Cyrus and Darius, and the Greek invasion of Alexander affected only the valley of the Indus and its tributaries. Each occupation lasted for only a few centuries. But the successive Scythian invasions of the *Sakas*, the *Kushāns*, and the *White Huns*, were followed by permanent settlements of large bodies of their countrymen, which lasted for many centuries, and which can still be traced in the names of the countries which they occupied. Thus the name of the *Sakas* was imposed on Drangiana as *Sakastene*, now Sistan, and their language was still spoken in the tenth century as the *Sakri*. The name of the *Kushāns* is still preserved in the *Koresh* tribes of Kāfiristan under their ruler, "Shah *Kitor*," and their language is still spoken as the *Kūfiri*. The name of the *Jābuli* tribe of White Huns is still preserved in Zābul-

istan, and their language still existed in the tenth century as the *Zäüli*.

The history of these three races can be traced from the date of their first appearance down to the present day. But there are other foreign races in the north-west of India, the date of whose occupation is quite unknown. The best known and the most numerous of these foreign races are the *Gakars*, the *Jâts*, the *Gujars*, and the *Ahirs*.

The *Gakars* declare that they came from *Kaiän*, in *Khorasân*, in the time of *Afrasiâb*. They claim descent from *Kld* or *Kaid*, and assert that they held *Kashmir* for sixteen generations. Their first appearance under their present name was in the reign of *Mahmud* of *Ghazni*, whom they opposed with thirty thousand men, as allies of *Auang-pâl*. In A.D. 1205 they killed *Muhammad Ghorî* in his tent on the banks of the *Indus*; and half a century later they offered a most stubborn resistance to the Emperor *Balban*. They were at last subdued, and their ruler, *Kokâr Sankâ*, became a *Musulmân*. In the beginning of the sixteenth century they opposed *Bâber*, but were reduced to submission. The whole of the hilly country between the *Indus* and *Jhelam*, known better by the name of the *Jûd* Mountains, or Mount *Jûd*, was then held by "two races descended from the same father, who from old times had been rulers of the hills between *Nilâb* and *Bhira*." "On one half of the hill" (says *Bâber*) "lived the *Jûd*, and on the other half the *Janjûha*." The people here called the *Jûd* must be apparently the *Gakars*, as *Bâber* adds that they and the *Janjûhas* were "old enemies." At that time the chief of the *Gakars* bore the title of *Malik Hast*, which was an old designation, as I find it used by the bard *Chand* in his *Prithi-Râj Râsa*, under the slightly altered form of the "*Gakar Malik Hath*." No

derivation is given for the name; but I think it probable that the Gakars may be the *Gargaridae* of Alexander's historians.¹ *Gharghara*, the "rumbler or gurgler," is the Sanskrit name of the *Gagar* or *Kagar* River, near Ambāla, and of the *Ghāgra* River of Oudh. This title of *Hast* or *Hath* is probably connected with the *Hyst* of *Hystaspes*, the *Vist* of *Vistaspa*, and with the *Bist* of *Bistax*, and the *Vit* of *Vitaxæ*, which was a royal title, as Hesychius says, ὁ Βασιλεὺς παρὰ Πέρσαις. It was equivalent to the Indian *Asicapati*, "lord of horses," a common title for kings. Another form is ΠΙΤΥΑΞΗΣ. The title of *Malik Hast*, or *Hath*, gives a strong support to the claim of the Gakars as immigrants from Khorasān. The same name is applied to the Gandgarh, or *Ghargar* Mountains, to the north-west of Rāwal Pindi, from which *rumbling* sounds are believed to issue from imprisoned demons. From this mountain the *Gakars* may have received their names, just as they got the name of *Jūd* from the Muhammadans. But if there is any truth in their claim to be immigrants from Khorasān, *Gakar* could not have been their original name. They were probably *Abars* from *Abar-shahr* (or Nishapur), the old capital of Khorasān, and it is not impossible that they may have been a colony transported by Darius into the Panjāb to hold his new Indian conquest. The earliest settlement is said by some to have been at *Abriyān* or *Abariān*.

The *Jāts* in old times are said to have divided Sindh with the Meds. They are now very numerous in the Panjāb, and in the districts to the east of the Satlej; and they form the bulk of the Sikh nation. Lassen has iden-

¹ Dionys., *Perieg.* V. 1144, mentions the *Gargaridae* after the Peukanei and Toxili.

tified them with the *Jártikas* of the *Mahâbhârata*, before the Christian era. Perhaps they may be the *Jatii* of Pliny. Our first notices of the *Jâts* are due to the plundering raids made by the early Muhammadans of Sistan and Mekran into Sindh in the latter half of the seventh century A.D. At that time the kingdom of Sindh embraced the whole valley of the Indus and its tributaries from the foot of the Kashmir Mountains to the sea, and from the east direct to the borders of Mekran and Khorasân. Sindh here divided into four provinces—I. Multan on the north; II. Brâhmanâbâd on the south; III. Ashkalanda on the east; and IV. Sivistan on the west. The most exposed province was *Kikûn*, which formed the southern part of Sivistan. Its capital was, Kandâbil or Gandhâva, with Kosdar on the south and Kilât on the west. This district was famous for a fine breed of large horses, which are specially noted by the Chinese pilgrim, Hwen Thsang, as well as by the Muhammadan historians. The people are called *Jâts* and *Meds*, and as they are described as *Samânis*, or Buddhists, I infer that to their religious belief was due the name of *Buddha* for the district.

The *Jâts* and *Meds* are described in the *Mujmalat-Tâdrikh* as being the most ancient inhabitants of the country. In the notices of the early Muhammadan writers the former would appear to have been more numerous in the north and west, while the latter, who stretched down to the sea, held the east and south. It seems probable, therefore, that the *Meds* may have given their name to *Medapâta*, or *Mevâr*, and that their present representatives may be the *Mers* of *Merutân* in the Aravali range of mountains. The *Jâts*, who are all Muhammadans, are still very numerous in the Panjâb, and along the Indus, while the Indian branch, or *Jâts*, who are all Hindus, are very

numerous between the Satlej and the Jumna. The Sikh Rajas of Patiala, Jhind, and Nabha are Jâts, and so are the Raja of Bharatpur and the Râna of Dholpur on the Chambal.

The name of Kikân or Kaikân, or Kaikânâñ I believe to be as old as the time of Darius, in whose inscription there is mention of a fort in Arachosia called *Kâpishkânîsh*, where the rebel Veisdatu fought a battle with the Satrap Vibanus. As the Greek *Kambistholi* and the Sanskrit *Kapishthala* have been shortened to *Kaithal*, so *Kaikân* may be accepted as a regular abbreviation of the Persian *Kâpishkânîsh* and the Scythian *Kâppissâkânis*. As it was a fort I would identify it with *Kilât*, the capital of Baluchistân. The rebel Satrap also fought a second battle in Arachosia at *Gadutâma*, or *Kauturata*, which I would identify with *Gandâra* of the present day, and with *Kandâbil* of the early Muhammadan writers.

The *Gujars* are scattered all over the Panjâb and the Gangetic Provinces. Their chief settlement was in the province which was named after them *Gurjarâshtra*. In the Panjâb their name still survives in the town of *Gujarât*.

The *Ahirs* are also scattered over Northern India. Their full name was *Abhira*, which they still held in the time of Alexander, who found them on the Lower Indus. The only place that now bears their name is the district of *Ahîrvara*, in the Gwalior territory. General Baptiste changed the name to *Isagarh*, but the people adhere to the old name.

The date of the great Aryan migration, which gave the dominant races to Persia and India, is uncertain. Roughly, it may be placed some twenty centuries before the Christian era. In Persia the Aryas were firmly

settled in all the provinces. We find them in Media, Hyrkania, and Khorasmia; in Bactria and Sogdiana; and in Aria, Drangiana, and Arakhosia. In India we find them in the people of Gāndhāra and Sattagydia, in the Assakani of the Kabul valley, and in the descendants of *Jajāti* (or Gegasios, Γεγάσιος), the Yādavas, the Pauravas, and the Anavas of the Panjāb.

From *Yadu* sprang the *Asvakas* or *Assakani*, who have been identified by Professor Lassen with the Aoghāns or Afghāns. From *Puru* came the *Pāndavas* (the *Pandori* of Ptolemy), and the *Paurava* king *Porus*, whose posterity are now represented by the *Pāndara* Rajputs of the Panjāb hills. From *Anu* sprang the *Anava* tribes of the *Sauviras*, the *Kaikeyas* and the *Madras*, with the *Yaudheyas* and their kinsmen the *Janjūhas*. The *Sauviras* of Sindhu Suvira most probably gave their name to Σωφιρύ, or *Ophir*. The *Madras* gave their name to *Madr-des*, which is still used for the Doāb between the Chenāb and Rāvi, which Akbar afterwards called the *Richna Doāb*. The *Yaudheyas* or *Jodhiyas* are now the *Johiyas* of the Salt Range and the Lower Panjāb, where the tract above Multān is still called the *Johiya-bār*. The *Janjūhas* still exist under the same name, or in its shortened form of *Janūha*, in the district of *Potawār*, between the Indus and the *Jhelam*.

The Aryan settlements in North India were still incomplete in the time of the *Vedas* and the *Mahābhārata*, or from about B.C. 1500 to 1200, when their territories were bounded by the *Karmanāsa* River (or *Karmndsa*) in the east, and by the *Varnanāsa* River (or *Bandā*) on the south. The passage of both these streams was forbidden to the Aryas, as the crossing of the first would be the “destroyer” (*nāsa*) of *Karma*, or good works; and the

crossing of the second would be the destroyer of *tarna*, or "caste." The prohibition about the *Karmnāsa* survived in full force down to the present century, when villagers were still employed to carry passengers over the stream, to save them from getting wetted. Their employment has ceased since the bridge was built.

Before the irruptions of the Indo-Scythians the valleys of the Oxus, the Helmand, and the Indus had been overrun by Cyrus, by Darius, and by Alexander; and to their expeditions is due almost all our early knowledge of those countries. Briefly they may be described as comprising Bactriana, Ariana, and North-west India.

The earliest notices that we possess are the campaigns of Cyrus, and the inscriptions of Darius. Kapisa, the capital of Kapissene, in Ariana, is said to have been destroyed by Cyrus, while the Assakeni, to the west of the Indus, are said to have submitted to him and paid tribute.² But in his campaign against the *Sacæ*, or *Sakas*, on the Jaxartes, he was defeated, and either killed or captured. Herodotus calls these Scythians *Massagetae*, but he admits that some regard them as *Sacæ*, or *Sakas*.³ Ktesias calls them *Sacæ*, and gives the names of their king and queen as *Amorges* and *Sparethra*. From the name of the king I infer that his people were the *Amurgii Scythæ* of Herodotus, and the *Sakâ Humawarkâ* of the inscriptions of Darius. The queen is named *Tomyris* by Herodotus, and her son *Spargapeises*. The two names of *Sparethra* and *Spargapeises* I would compare with *Spalahora*, *Spalirisha*, *Spalgadama*, and *Sapaleizes* of our well-

² Plin. *Nat. Hist.* vi. 25, and Arrian, *Indica*, I.

³ Herodotus, I. 205, calls the queen *Tomyris*. Ktesias alone calls her *Sparethra*.

known Saka coins; and I conclude that the Saka-Scythians of the Jaxartes, with whom Cyrus came into contact, were the ancestors of the *Sakas* who long afterwards established themselves in Sakastene or Sejistan, and not the *Massagetae*.

With the inscriptions of Darius, B.C. 520—490, we reach the firmer ground of real history. He was an administrator as well as a conqueror, and every country that he subdued was added permanently to the Persian empire. In the Naksh-i-Rustem inscription he names the eastern provinces in the following order:—

Parthia, Aria; Bactriana, Sogdiana, Khorasmia; Zarangia, Arakhosia, Sattagydia; Gandaria, India.

The revenue of each province was fixed, and governors were appointed, and about one century and a quarter later the whole empire passed into the possession of Alexander.

Before invading India Alexander the Great conquered Bactria and Sogdiana, where he came in contact with the *Massagetae* and *Dahae*. The *Assakani* then held the greater part of the Kabul Valley, with Massaga as their capital.⁴ They possessed a large army of 20,000 horse, 30,000 foot, and 30 elephants. Their king *Assakanus* was killed in battle, and their queen *Kleophas* then surrendered the capital. Two brothers, named *Kophaeus* and *Assagetes*, came in. As *Assagani* is only a plural form, meaning the nation or people called *Asiakas*, or *Assakas*, or the "Horsemen," it was suggested by Lassen that the *Assagani* were the actual ancestors of the present Afghans. In support of this suggestion I can refer to the fact that the people generally do not call themselves *Afghans*, but

⁴ *Arrian. Anab.* iv. 25, 26, and *Indica*, i.

Aoghâns, and that the Albanians are called *Aoghâns* by the Armenians.

As the Sanskrit *asica* becomes *equus* in Latin, as *sicasri* becomes *khicar*, or *khor*, in Pushtu, and as *Sarasicati* becomes *Arakhoti* and *Harakhaiti*, so *Asicagân* became *Akhvagân*. In fact the old form of Afghân was Aoghân, and both Timur and his secretary write Aogbâni, and even Aghâni. The change from *l* to *gh* by the Armenians is found also in *Vagharsh*, for the Persian *Balash*.

I find that the name of *Albania* is given by Pliny to the country of the Indian Sophytes.⁵ As the salt mines were in his territory, the name must have been applied to the country between the Jhelam and the Indus; and as the salt mines are found also at Kâlâbâgh, the name of *Albania* may have included territory to the west of the Indus.

According to Ammianus there were *Alani*, or *Albani*, to the east of the Caspian. When war broke out between Persia and Rome in the time of Sapor II., the Persian king was absent in his north-east frontier in hostilities with the Chionitæ and *Albani*. Both nations had powerful kings; and in the subsequent siege of Amida in A.D. 358, Sapor was very greatly assisted by their troops.⁶

It is in favour of the original name of *Aswabeus* that several districts in Afghanistan were famous for their breed of horses. Thus—

(1.) *Bannu*, the *Falana* of Hwen Thsang, gave its name to the “*Vanâyu-ja* horses,” which were much esteemed.

(2.) On the eastern side of the Indus lies the district of *Dhâni*, where Runjit Singh had a breeding stud. Pânini

⁵ *Plinii Nat. Hist.* viii. 61, and *Strabon.* xv. 1—30.

⁶ *Ammian. Marcel.* xviii. 6, 21, and xix. 2, 8.

calls the country *Varnu*, with a river of the same name, which is the Bannu River of the present day.

(3.) When in Falana, the Chinese pilgrim Hwen Thsang notes that on the west, in *Ki-kiang-na*, the people had an immense number of sheep and horses, and that the horses were of large size and excellent. A few years later the early Muhammadan invaders were continually making raids into Kikān, or Kaikān, for the purpose of obtaining some of these famous steeds. Thus, in A.D. 664, Muhallab, when in Kikān, saw eighteen Turki horsemen on crop-tailed horses. The men fought with great gallantry, which Muhallab attributed to their horses, and accordingly *he docked the tails of all his own horses!* A few years later Abdullah presented a Kikān horse to the Khalif. Perhaps the name may have some connection with *kikatā*, a "horse." It is not improbable that it may be the mediæval form of *Kapishkanish*, a fort in Arakhosia, held by a rebel against Darius. In the same way that the Sanskrit *Kapisthala* has been shortened to *Kaithal*, so *Kapishkanish* may have become *Kaikān*, or *Kaikāna*.

(4.) Ferrier notices (*Afghans*, p. 297) the "splendid animals" of *Herat* and *Hazāra*, which are taken to India for sale to the cavalry and artillery.

At the present day all the people of Afghanistan, from the Indus on the east to the Heri-Rūd River on the west, speak Pushtu, or Pakhtu. But the clan which bears the name of Pushtun, or Pakhtun, claims to be distinct as the original speakers of the language. It is even affirmed that all the other clans who speak Pushtu are immigrants who have adopted the language. The name of *Paktüike*, or *Pakhtunka*, we know to be as old as the time of Darius; but the name of *Assakani* is equally old; and as the districts of the Paktyans and of the Assakani were in

Gāndhāra, the language of both peoples was most probably the same.

But there is mention by Ktesias of another clan who must also have belonged to Gāndhāra. These are the *καλύστριοι*, whose name is said to mean "dog-headed," or *κυνοκέφαλοι*. I accept the name of *Kalustrii* for reasons which I will give presently; and I look upon the asserted translation of "dog's head" as a mere nickname—perhaps by a slight alteration of a well-known Indian descriptive term. Thus *asicamukha*, or "horse-headed," might with some reason have been applied to the Eastern Ethiopians, who wore the scalps of horses for their head-dress, with the ears erect. By omitting the initial letter, the term would become *sicā-mukha*, or "dog-face." But whatever may have been the origin of the nickname of "dog's-heads," it is quite certain that *kalustrii* could not have that meaning. But Pliny mentions a people on the Lower Indus called *Salabastræ*, or *Arabastræ*, whose name might be the Indian *Kāla-rastra*, or "Black-vests," synonymous with the Persian *Siya-pash*, which is still applied to those people in Afghanistan who wear "black sheep-skin" dresses. As Ktesias specially notes that the name was given to them by the Indians, the derivation from *Kāla-rastra*, or "Black-vests," seems a very natural one. Other details which Ktesias gives seem to fix the country of the *Kalustrii* beyond all possibility of doubt. "They inhabit," he says, "the mountains and extend as far as the river Indus." These mountains were "steep and pathless." The river *Hypurkhos* (Pliny says *Hypobares*⁷) flowed through their country. As this name is said to mean *φέρων πάντα τὰ ἀγαθὰ*, its more correct form would be

⁷ *Plinii Nat. Hist. xxxvii. 2.*

Eubares, in Sanskrit, *Subhara*. On its banks grew a tree, called *sipitakhora*, which bore a very sweet fruit, with a stone as large as a filbert nut. This fruit was dried and packed in plaited baskets, like raisins. This description points to the *shaft-āru*, or peach, and the *zard-āru*, or apricot, both of which grow in Afghanistan, where they are split open, dried, and packed in small baskets, or wooden punnets, for exportation.⁸

Two other products of the country of the Kalustrii seem equally well to fix its position to the west of the Indus. It produced "a purple flower, used for making a purple dye, not inferior to the Greek sort, but of a far more florid hue." This was the *manjīth*, or "madder." The other product was an insect which, when crushed to powder, yielded a purple dye, superior to that used by the Persians. This insect was the *coccus lacca*, or "lac insect." The "tears of gum, like amber," were, of course, derived from the cases of the *coccus lacca*, which are commonly known as "shell lac."

Thus all these products of the Kalustrii, as described by Ktesius, still form some of the staples of Afghanistan. The *dried fruits* packed like raisins, the *madder*, the *lac dye*, and the *shell lac* form part of the present traffic of the country, as I can personally vouch for.

A strong reason for my adoption of the name of *Kalustrii* without any alteration is the curious fact that it corresponds with that of the alphabet which was in use

* *Fragments of Ktesias*, translated by McCrindle, pp. 22—24. The animal which Ktesias calls *mariikhora*, or "man-eater," is simply the well-known "wild goat," or *mārkhor*, the "snake-eater," which abounds in the Sulimāni Mountains of Afghanistan. As the Kalustrii by some slight alteration of name were believed to have heads like dogs, so the *mārkhor* had a head like a "man" (*mard* in Persian).

all over Gāndhāra in Afghanistan for several centuries both before and after the Christian era. In the account of Buddha's education it is stated that the young prince Sakya Sinha was taught sixty-four different alphabets, of which three are distinguished by the direction of their writing.

- I. *Brahma*—written from left to right.
- II. *Kharosti*—written from right to left.
- III. *Chinese*—written perpendicularly.

In the Chinese version of the *Lalita Vistara* the *Kharosti* (*Kai-lu-she-ti*) is said to mean "donkey's lips." But as the full name is *Kharoshtri*, as written by Dr. G. Bühler, it agrees letter for letter with the *Kalustrii* of Ktesias. The *Kharoshtri* script, which was written from right to left, would therefore be the alphabet of the *Kalustrii* of Gāndhāra, to the west of the Indus. We thus learn that the name of the Gāndharian script, which is found in the Western inscriptions of Asoka on both sides of the Indus, was called *Kharoshtri*. In my book on the *Coins of Ancient India* I have called it the *Gāndharian* alphabet, a name which accurately describes the extent of country in which it was used—its earliest use, so far as is known at present, is in the inscriptions of Asoka, and on the Indian coins of Demetrius, the son of Euthydemus, which date from the third century B.C. But as it had already added the Indian vowel system with the aspirated consonants to its scanty Aramaic original, it is certain that it must have been in use for a long time previous to Asoka. Dr. Isaac Taylor thinks that the original Aramean alphabet must have been introduced into Afghanistan and the Panjab some time after the accession of Darius in B.C. 520. With this conclusion I cordially concur; and I would fix "the expansion of the alphabet with its

simple vowel system and aspirates between 500 and 400 B.C., after its contact with the more fully developed system of the Indian alphabet."

The name of Kalustrii still remains to be explained. The "dogs' heads" of Ktesias and the "asses' lips" of the Chinese may be dismissed at once. At the present day there are two of the travelling merchant tribes of Afghans, the *Ushuris* and the *Kharotis*, who may perhaps still preserve the name. The former tribe live in "black tents," and might therefore be called *Kâloshtari* (*Kâla-tastra*), and the latter tribe, the *Kharoti*, give the general curtailed form of the name. Both tribes are engaged in the carrying trade, and both are included under the general names of *Porinda* and *Lohâni*, from the nature of their occupation. "They usually assemble in autumn in the plains of Zurmat, Gardez, and Kattawâz, to the east of Ghazni, and make their way through the passes to the Derajât, where they leave their families and flocks. The men go with their goods to India. These consist of fruits, madder, assafœtida, wool, and furs; in exchange for which they bring back cotton cloths, brocades, and muslins." In fact the *Kharotis* of Afghanistan still carry on the same trade which the *Kalustrii* of Gândhâra pursued four centuries before the Christian era.

In the Babylonian and Scythian versions of the inscription of Darius the name of *Parupamisana* is substituted for Gâdâra (or Gândhâra). The former would appear to have been the Persian name, while the latter was the Indian name. In the *Bundahis*, the *Murgâb*, the *Hari-rud*, and the *Helmand* are all said to have their sources in Mount *Apârsen*. Ptolemy also includes the upper course of the *Kabul* River. These accounts agree with the description of Strabo, that "the southern parts

of the Paropamisus belong to Ariana and India, the northern parts toward the west to Bactriana." As Ptolemy excludes the district of Gandaritis, the Paropamisadae may be described as embracing all the peoples of the *upper courses* of the Merv, Hari-rud, Helmand, and Kabul Rivers. Strabo also particularly notices that though "the Macedonians gave the name of Caucasus to all the mountains, yet among the barbarians the heights and the northern parts of the *Paropamisus* were called *Emoda* and Mount *Imaus*;" that is, the Indians called them *Himāvat*, or snowy mountains. The Paropamisadae therefore corresponded with the mountainous districts in the upper sources of these rivers, which are now held by the mixed races called Hazāras.

Of the early inhabitants of the mountainous country we know absolutely nothing. Dionysius indeed mentions the *Satraïdæ* as dwelling $\pi\tau\chi\dot{\iota}$ Παρπανισοῖο in the valleys of Paropamisus in common with the Ariani. Priscian retains the name (v. 1004) in his translation; but Avienus changes it to *Sagam infidum*, as if he considered them to be *Sacæ*. The name may, however, be compared with *Satraphernes*, *Sitraphernes*, *Sitratachmes*, and others derived from the *Chitra* or leopard. *Shethar-boznaï*, or in the Septuagint Σαθαρβοζαῖ, is commonly found in the form of *Sati-barzanes*, just as *Chitra* has become *Chita* in the spoken language. Hence perhaps the *Sattraïdæ* may be the same people as the *Sattagudai* of Herodotus, and the *Thatagush* of Darius's inscriptions, whom some writers have identified with the Paropamisadae.

But whoever may have been the first inhabitants of Paropamisus, it is certain that the earliest occupants of whom we have any clear mention are the Afghan tribes

of *Ghor*, the Suri and Lodi, who were employed under Subuktigin and Mahmud in the end of the tenth century A.D. The Hazāras are not mentioned until the time of Mangu Khan, who sent an army of Mugals to the assistance of Hulāku, about A.D. 1250. Abul Fazl says that the "tribe of Hazāra are the remains of this army," and that "they inhabit the country from Ghazni to Kandahar and Maidān, to the borders of Balkh." Utbi, the historian of Mahmud, speaks of *Avghāns*, Turks, and *Khiljis*. At a later date different writers speak of *Arghán* and *Jarmai* Hazāras. I agree with Sir William Jones and Dr. Dorn in considering the Afghans as the original inhabitants of the country, the Paropamisadæ of the time of Alexander.

It must be remembered that the peoples to the west of the Indus did not call themselves Afghans, that name having been applied to them by their Persian neighbours. Muhabbat Khan says, "The original spelling of this word is *Afghán*, but *fa* not being used in the Afghan language, I have placed it under the head of *alif* and *vau*." Accordingly he spells the name *Avghán*, with the plural *Avghánián*. This is the form used by the Chinese pilgrim Hwen Thsang in A.D. 620, who, on leaving *Fa-la-na* (Bannu), passed through *O-po-kien* on his way to *Ho-si-na* or Ghazni. *Opokien* is rendered by Julien as *Avakan*.⁹ Of course he must have passed through the district of the *Kharoti* Afghans on his way from Bannu to Ghazni.

With regard to the Afghan claim to be the descendants of the ten lost tribes of Israel, it may perhaps be sufficient to point out that Saul, the son of Kish (or Talut bin Kish), belonged to the tribe of Benjamin, which was not one of the ten that were carried into captivity. This

⁹ Julien's *Hwen Thsang*, i. 265.

claim, of course, was never heard of until their conversion to Islâm. It must be remembered also that there is another quite different genealogy which traces the descent of the Sultâns of Ghor from the Turanian Zohâk, whose children took refuge in the hills of Bamian, and eventually settled in Ghor after the victory of Faridun. In this long list there is not a single Hebrew or even Muhammadan name until four generations preceding Shah Muizuddin Ghori, the conqueror of India. Even so late as the beginning of the eleventh century Mahmud of Ghazni gave his sister in marriage to *Malik Shâhu*, the chief of the Afghans of Zabulistan. He became the father of the notorious Salâr Masaud Ghâzi.

The language of the Afghans is called Pashtu, and is said to derive its name from the Pashtun or Pakhtun clan, whose country is called *Pakhtunkha*, the *Paktuice* of Herodotus. Whether Pashtu was the language of the Afghans in the time of Alexander we have no means of proving, as most of the names preserved by the Greeks seem to be purely Indian. Thus SOPHYTES is simply *Subhuti*, SISIKOPTUS is *Sasigupta*, the KOPHES R. is the Vedic *Kubha*, and the ARAKHOTUS R. is the *Sarasicati* or Harakhaiti. It is certainly most probable that the language of the people was Pashtu. But it is quite impossible to believe that the people who elaborated the *Gandharian* or *Kharoshthi* alphabet could have been even half as wild and barbarous as the Paktyans of Herodotus and the Kalustrii of Ktesias. Their accounts might perhaps be accepted as descriptive of the wildest dwellers of the mountain tracts, while the inhabitants of the valleys of the Kabul, the Kuram, the Arachotus, and the Arghandab Rivers were comparatively civilised by their intercourse with their Indian neighbours. To them I would ascribe the adoption of the

Persepolitan architecture, and its transmission to India, where it took root and flourished, uninfluenced by the subsequent introduction of Greek architecture into the Kabul valley and West Panjâb. To them also I would ascribe the introduction of the sculptor's art, and the knowledge of coined money before the advent of Alexander. All of these they no doubt learned from the Persians. And we know absolutely that Taxila, or *Takshasila-nagara*, was a "city of hewn stone," that Omphis, the Raja of Taxila, presented Alexander with 80 talents of coined silver, and that a *statue of Hercules* was carried in front of the army of Porus in his battle with Alexander.

The eastern Alani, or Albani, whether they were Afghans or Massagetae, would appear to have been a people of some consequence during the early centuries of the Christian era. In A.D. 53 the *Dahæ* and *Sacæ* suddenly invaded Parthia and forced Vologeses I. to retire. A few years later, in A.D. 58, the Hyrkanians revolted, and sent an embassy to Nero which, on its return in A.D. 62, was sent by order of Corbulo by way of the Persian Gulf to escape the Parthians. A peace had been made but it was soon broken, as in A.D. 75 the Alani Scythians being allowed to go through Hyrkania, made a sudden raid through the Caspian Gates into Media. Pakorus, the Satrap of Media, fled before them, and Tiridates, the King of Kawan, was defeated. Flushed with their successful fray, the Alani returned with much plunder to their own country.

From this account of their march through Hyrkania, I conclude that the Alani must have occupied the Western Paropamisus, or the hilly districts lying between Herat on the west and Ghazni on the east, that is the whole of Western Afghanistan, including the little-known district

of Feroz-koh and Ghor. This position is in full accord with their subsequent history in the time of Sapor II. When the Romans declared war against Persia, the Sasanian king was on his north-eastern frontier engaged with the Chionitæ, the Albani, and the Segistani. Sapor at once made peace with them, and succeeded in engaging them as allies in his war with Rome ; Ammianus, who saw all three at the siege of Amida, describes them as powerful and brave allies, who were of signal service in the reduction of Amida. The *Chionitæ* I have identified with the *Tokhari* or *Kushâns* of Kabul, and the *Segestani* are well known as the *Sakas* of *Sakastene* or Sistan ; but who were the Albani ? In another place Ammianus describes the *Alani* as Massagetæ, who extended far to the East, even, as he was told, to the Ganges, or, in other words, towards India. Clearly they seem to be the same as the *Alani* of Josephus, who in A.D. 75 passed through Hyrkania and ravaged Media.

It is of course possible, and perhaps even probable, that there may have been some confusion between the names of *Albani* and *Alauni* or *Alani*, and that the Eastern *Alani* had no real existence. But the existence of the Eastern *Albani* seems to rest upon very sure grounds : (1) We have Sophytes, King of Albania ; and (2) the King of the Albani who accompanied Sapor II. to the siege of Amida.

We have a signal example of a name given through sheer mistake in the West Indies, but this is probably a very rare case. The transference of a name is common enough, as in the case of the *Pârsis* of Bombay and the Rohilla Afghans of Rohilkhand. In earlier times we have *Sakastene*, named after its *Saka* conquerors ; *Zâbulistân* after the *Zâbûli* or *Jâwali* White Huns, and the country of Shah Kitor after *Kidâra*, the King of the *Kushâns*.

So the country to the west of the Indus, having been occupied by the descendants of *Anu*, the *Anucâns* or *Anwâns*, it may have been called *Anwânia* or *Albania* after them.

LATER INDO-SCYTHIANS.

GREAT KUSHÂNS.

In my previous accounts of the Indo-Scythians I have traced briefly the histories of the two great hordes of *Sakas* and *Kushâns*, from their first appearance on the Oxus in the second century B.C., down to their final settlements in the countries to the south of the Indian Caucasus. The *Sakas*, under a long line of Princes, or Satraps as they chose to style themselves, continued to hold the provinces on the Lower Indus, with the neighbouring districts of Surashtra and Mâlwa, until the close of the fourth century A.D., when they were subjected by the powerful Gupta kings of Northern India.

Of the early kings of the *Kushâns* we have numerous coins. Hermaeus, the last of the Greek Princes of Northern India, came to terms with Kujula Kadphizes, the "King of the *Kushâns*," and their two names appear on different sides of the same coins. By the Chinese the *Kushâns* were called *Ta-Yue-ti*, or the "Great Lunar Race,"¹⁰ but their true name, as found in both inscriptions and coins, was *Kushân*. In India, however, they were more generally known as *Tushâras*, or *Tukhâras*, or "Snow-landers," the

¹⁰ That is, if *Yue* be taken for the "moon." But I incline to take *yue-ti* or *Gweti*, the general name given by the Chinese to several of the Tartar races. And further, I think that as *Ta* means "great," the *Ta-Gweti* must be the *Massa-Getæ*.

Tōχaroi of Ptolemy, the *Tochari* of Pliny and Ammianus, and the *Tu-ho-lo* of the Chinese pilgrim Hwen Thsang.

Of the speech of the Kushāns we know nothing except the titles of *Shao* and *Shaonano Shao*, or "King" and "King of Kings," as all their inscriptions are recorded in the well-known language of India. As they were Turks their language must have been *Türki*; but, as they were ignorant of writing, they must have adopted one or both of the two alphabets of their Greek predecessors. These were the *Greek*, which was written from left to right, and the *Gandharian* or *Kharoshtri*, which was written from right to left. On a few of their earlier coins the Kushāns adopted the Greek title of ΒΑΣΙΛΕΥΣ and ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΩΝ ΣΩΤΗΡ ΜΕΓΑΣ, but these were dropped during the reign of Kanishka, and the only trace of the Greek language that I have found on any of the Indo-Scythian coins is the title of *Strategasa*, or Στρατηγός, taken by Aspa-varma, the "General" of Azas.

According to the Chinese all the kings of the *Tuholo*, or *Tochari*, bore the title of *Shao-iu*, which is transliterated in Greek by ΖΑΟΟΥ, or *Zaru*, on the coins of Kozola Kadaphes, and in Gandharian letters by *Yarila* on some and by *Yāṅga* on others.¹¹ I take this to be the same title as ΡΑΟ, or *Shao*, on the coins of the later Kings Kanishka, Huvishka, and Vāsu-deva, and the *Shāhi* of the Indian inscriptions of Kanishka and Vāsu-deva. This title of *Shāhi* continued in use amongst their Indo-Scythian successors down to the time of Mahmud of

¹¹ In his *Catalogue of the Coins of the Scythic Kings of India*, Mr. Percy Gardner, p. 123, notes that this word was originally wrongly read as ΖΑΘΟΥ, but he omits to mention that the correction had already been made by me in the *Num. Chron.* for 1872, fourteen years before.

Ghazni, as Beruni calls his enemy "Anangpâl the *Shâhi*," and the Raja Tarangini styles *Trilochanpâl* "the last of the *Shâhi* kings." The name of *Kushân* also survived until the ninth century, as Ibn Khordâdbeh calls the Ruler of Mâwar-un-nahar, the "King of the *Kushâns*."

Hwen Thsang describes the language of the *Tu-ho-lo* as being somewhat different from that of other countries; but their alphabet he describes as consisting of "twenty-five letters, which were written horizontally from left to right."¹² The language of *Bamian* and *Kapisa*, he says, was slightly different, but that of *Tsaokuta*, of which Ghazni was the capital, was quite different.¹³ The Indian letters he states were forty-seven in number. As this last statement is strictly accurate, I have some confidence in the correctness of his description of the *Tuholo* or *Kushân* alphabet as consisting of twenty-five letters which were written from left to right. As this direction of the writing excludes all Semitic alphabets we have only the Greek and the Indian alphabets left from which to choose. The choice is not doubtful, as we know that the *Kushâns* continued to use the Greek alphabet on their coins until the time of Hormazd II. of Persia, A.D. 300, who had married a daughter of the King of Kabul. As the Greek alphabet has twenty-four letters, the addition of *p* or *sh* completes the number of twenty-five assigned by Hwen Thsang to the alphabet of the Tochari or *Kushâns*.

On the earliest coins bearing the name of **BAZO** **ΔHO** or *Vâsu Deva*¹⁴ the Greek legends show little

¹² Beal, *Siyuki*, i. p. 38. ¹³ Beal, i. p. 50, and ii. p. 283.

¹⁴ I claim the discovery of the true reading of this name, which was read as *Baraoro* by Wilson (*Ar. Ant.* p. 877). Thomas at first disputed my reading, but he eventually gave in.

debasement excepting in the letters **Z**, **H**, and **N**. The **H** has become **h** and the **N** has become **H**, while the **Z** has changed to a form like the Indian figure α . But on the later coins, which bear the names of **KANHPKO** and **BAZO ΔHO**, the letters **A** and **Δ** have become round, and are not easily distinguished from **O**. I have seen no late *gold* coins of Huvishka, although very corrupt *copper* coins bearing his name are common. I note that the coins which have the name of *Kaneshko*, ending in *ko*, all bear the peculiar symbol of *Vāsu Deva*'s money, on which account I attribute them to the late period of the third century A.D., after the death of *Vāsu Deva*. On all these later coins there are Indian letters in the field, either single letters or monograms. The reverse types of all these later *Kushān* coins are confined to the figures of the seated goddess *Ardokhsho*, or *Lakshmi*, and the standing god *Oksho* or *Siva* with his Bull. The former type prevailed in the Kabul valley and was adopted by the Sassanian kings for their Bactrian coins; the latter type prevailed in the East, where it was adopted by the Gupta kings in the middle of the fourth century A.D., and eventually it formed the lasting types of the Kashmir coinage down to the Muhammadan conquest in the fourteenth century.

All these *Later Kushān* coins may be divided into two classes, which I will call Class A and Class B. They formed the money of the Kabul valley and the Panjāb from the time of *Vāsu Deva*'s death, or about 180 or 200 A.D., down to the settlement of *Kidāra Shah*, or *Ki-to-lo*, in *Gāndhāra*, about A.D. 425. *Ki-to-lo*, the King of the Great *Kushāns*, established his son in *Purushākar*, or *Peshāwar*, and thus formed the kingdom of the *Little Yue-ti*, or Lesser *Kushāns*.

Class A comprises a numerous series of gold coins bear-

ing the names of *Kanisha* or *Vdsu Deva* in Greek letters, but always accompanied by Indian letters in the field outside the King's spear. The *Obverse* is the same on all, namely, the King standing as on the coins of *Vâsu Deva*, but the reverses have the two different types of *Ardokhsho* or *Oksho*. As these two deities are the representatives of the Indian *Lakshmi* and *Sîra* I think it probable that the coins may have been the produce of different places where the worship of *Vishnu* and *Sîra* was respectively in favour. The greater number of these coins are found in the Panjab, but a few gold coins have been found in Sînpas, in the Kabul valley. The *Lakshmi* coins are specially common in North-West India, while the *Sîra* coins come principally from the West. The former belonged to the Eastern provinces, the latter to the Western provinces of the *Kushân* Empire.

Many years ago, after I had deciphered the title of *Strategas* on the coins of Aspa Varma, the son of Indra Varma, the "general" of Azas,¹⁵ I formed the opinion that these coins with Greek legends and Indian letters in the field might perhaps be the local issues of Indian mints under different satraps, whose names might be indicated by the Indian letters. These satraps might have been either Indo-Seythian nobles, or native chiefs, the tributary Hindu rulers of their ancestral dominions. We now know that *Yen-Kao-chin* or *Yen-Kao-chin-tai*, the son of *Kieu-tsieu-khio*, conquered India, and established his "generals" as governors in the name of the *Yueti* or *Kushâns*. This Prince *Yen*, or *Wen*, is the famous *Wema Kadphises* from whom all the chiefs of Bactria and Sogdiana claimed

¹⁵ Published in the Bengal Asiatic Society's Journal for 1854.

descent.¹⁶ The same system of Government was no doubt continued under his successors *Kanishka*, *Huvishka*, and *Vāsu-deva*, and was probably continued down to the close of the Kushān rule. Unfortunately the Indian letters on coins of this class are usually single characters, excepting in the three examples of *Viru*, *Mahi*, and *Vāsu*, which might represent genuine Hindu names, such as *Virudpaka*, *Mahidhara*, and *Vāsu-deva*. But though the names may be Indian, the men might have been Indo-Seythians; for we know that the son of *Chashtana* was *Jayadāma*, the son of *Rājubula* was *Sodasa*, and the son of *Chhagaliga* was *Vishnu-dāsa*. In all these instances the Scythian father gave his son an Indian name. The fact is that the Kushāns themselves soon became Hinduized, and the Scythian *Huvishka* was followed by *Bazo-deo* or *Vāsu-deva*, whom I would identify with *Jushka*, of the Raja Tarangini. On his accession he probably took the Indian name. A barbarous race of conquerors settled amongst a more numerous and more civilised people soon loses its nationality. After the conquest of India and their conversion to Buddhism the Kushāns became thoroughly Hinduized, and gradually adopted the alphabet as well as the language of the conquered people. I have already remarked the prevailing use of Indian letters on the coins bearing the name of *Vāsu Deva*, as well as the entire absence of any inscriptions of his reign in Gāndharian letters. The only Gāndharian inscription of an undoubted later date is my stone record from Panjār, which is dated in s. 122, or A.D. 200.¹⁷ It mentions the *Maharayasa Gushanasa Raja*

¹⁶ *Yen*, *Wen*, and *Hen*, I understand to be different pronunciations of the same character.

¹⁷ Bengal Asiatic Society's Journal, 1854, "Coins of Indian Buddhist Satraps."

. . . . but the name is unfortunately lost. As Vâsu Deva's earliest record is dated in s. 74, or A.D. 152, and his latest in s. 98, or A.D. 176, this Panjtâr inscription must almost certainly belong to some later king. I have read the date of a short inscription found by Mr. L. King, at Hashtnagar, as s. 274 or 275, equivalent to A.D. 352-53.¹⁵ There is no objection to this later date, as we know from Samudra Gupta's Allahabad Pillar inscription that the *Daiya-putra Shâhân-Shâh* was his contemporary. As these are the titles of the Kushân kings it is certain that they were still powerful. The use of the Gândharian alphabet may still have lingered amongst the people, although it had been given up by the kings.

All the coins of the later Kushâns present the same uniform type of *Obverse* of the king standing to the front, with his right hand extended over a small altar, and holding in his left hand either a spear or a trident. The inscriptions on the early coins of Class A are all in debased Greek letters, which when nearly complete give the names and Kushân titles of Kanishka and Vâsu Deva. On the *Reverse* there are only the two well-known types of the seated goddess ΑΡΔΟΧΡΟ, and the standing god ΟΚΡΟ with his Bull. I notice that with the former type the king holds a spear or sceptre, but with the latter a trident.

The obverse legend is ΠΑΟΝΑΝΟ ΠΑΟ ΚΑΝΗΡΚΟ ΚΟΡΑΝΟ, or ΠΑΟΝΑΝΟ ΠΑΟ ΒΑΖΟΔΗΟ ΚΟΡΑΝΟ.

The reverse legend is either ΑΡΔΟΧΡΟ, or ΟΚΡΟ.

On all of them the symbol is uniformly that of Vâsu Deva.

¹⁵ The date of 274, published by Mr. V. Smith, *Indian Antiquary*, 1889, p. 257, is not quite certain; but I still think it must be 274 = A.D. 352, and I see that Dr. Bühler accepts the reading of the date, but doubts whether it can be referred to the era of 78 A.D. The earlier era of 57 B.C. would give 217 A.D.

In Plate I. I have arranged all the early coins on which the principal monogram in Indian letters is placed outside the king's spear. On a few specimens there is only a single Indian letter; but on most of the coins there are Indian monograms or letters in three different parts of the field—(1) on the left, near the king's right foot; (2) in the middle, between the king's feet; (3) on the right, outside the king's spear or trident.

On these gold coins I think it probable that we have the names, in monogram, of some of the first successors of the great Kushān Princes, Kanishka, Huvishka, and Vāsu Deva. On some coins the names may perhaps be those of the satraps or governors of particular provinces. In this case I should expect to find the name of the province or city of the satrap, in addition to his name.

In the following table I have arranged all the Indian monograms and letters, showing their positions on the coins as left, middle, and right. In this way they can be more readily compared with each other.

Reverse, APΔΟΧΡΟ.

Pl. I. No.	King.	Obverse.			Reverse.
		Left.	Middle.	Right.	
1	Kanishka	—	—	Pa	
2	"	Ha	—	Vi	
3	"	Nya	Thā	Vi	Thā
4	"	Nya	—	Viru	Ru
5	"	Sa	Chu	Vāsu	
6	"	Sa	Ga	Vāsu	
7	"	Khu	Chhu	Vāsu	
8	"	Bha	Ga	Vāsu	
9	"	Vai	Thā	Chhu	Thā
10	"	Vai	Thā	Si	Thā
11	"	—	Pu	Mahi	
12	"	—	—	Bhṛi	

Reverse, OKPO.

Pl. I. No.	King.	Obverse.			Reverse.
		Left.	Middle.	Right.	
13	Vāsu Deva	—	—	Ha	Ha
14	„	Raju	Gho	Rada	
15	„	—	—	Pri	
16	Kanishka	Ga	Gho	Hu	
17	„	Ha	Thā	Aum	
18	„	Ga	Gho	Phri	

Class B.—The coins of this class are chiefly of gold. Some of the copper specimens are undoubtedly ancient forgeries, from which the gilding has worn off. They still present the remains of Greek legends in the margin, but the letters are illegible, and seem to be a mere repetition of o o o. Indian letters now appear in two or three places of the field. One monogram occurs outside the king's spear, as before. A second monogram is under his arm, and a third is placed under his right hand, near the altar. In 1883 Mr. E. Thomas published a paper on this class of coins, in which he treated the monograms outside the spear as giving the names of different tribes of Scythians, while the letters under the king's arm he explained as the "names of kings or military chiefs located in India," apparently as independent rulers.¹⁹

During the past forty years I have made several attempts to read these monogram names, in much the same direction as Mr. Thomas. But, though our methods agree generally as to the names, I prefer to take the monograms

¹⁹ *Indian Antiquary*, vol. xii. pp. 6—11.

outside the spear as indicating places, the seats of distinct Satrapies. So, also, I look upon the names under the arm as those of the Satraps, or governors of provinces tributary to the great Kushān Kings of Gāndhāra. On the Gupta coins the kings' names are placed perpendicularly under the arm.

Mr. Thomas gives the names of five different tribes as :—

1. *Shaka*. 2. *Kushān*. 3. *Gadaha*. 4. *Shandhi*. 5. *Mahi*.

The readings of *Shaka* and *Kushān* are incontestable. *Gadaha* on well-preserved specimens is *Gadahara*, and on some of my coins I find *Gadakhara*, which is perhaps only a variant of the same name. The reading of *Shandhi* I cannot accept, as the monogram appears to begin with P, which *may be* followed by SH, but which is certainly followed by K, over which is placed the vowel I. Then come N and DH, which make up *Pakīndha*, or *Pakanīdhī*. If the letter SH be admissible, then the name may be *Pashkīndha*, or *Pushkāndī*. But there still remains another element of doubt in the upright stroke which passes through the cerebral n, which would add either H or L, or both, to the monogram. The name might, therefore, possibly be *Pakalahadhi*, or even *Pushkalāndhi*, which would represent the Pakhali of the present day.

Mr. Thomas's MAHI is, of course, a correct reading, but I think the name must be that of a king, and not that of a tribe. I have, therefore, included my specimen of *Mahi* in Class A.

In proposing geographical names for these monograms, in preference to the tribal names advocated by Mr. Thomas, I am guided chiefly by the fact that all these coins are found in the Northern Panjab, where we know that several districts were under the rule of satraps, or governors, who were appointed by the paramount sovereigns

of Gāndhāra. At present I cannot offer any absolute proofs of my proposed assignments, but they appear to me to be much more probable than those proposed by Mr. Thomas. The following are my proposed readings:—

I. SHĀKA.—Thomas has duly noted that this name is always spelt on the coins with the cerebral sibilant *sh*, **ش** instead of the palatal *ṣ*, **ش**. But he has omitted to notice that the name on the coins is generally *Shāka* with the long *ā*, which is never used for the name of the *Sūka* tribe. I prefer, therefore, to read *Shāka* as intended for the city of *Shākala*, which was the capital of the Eastern Panjāb. It was the residence of the Greek King Menander, and in later times of the Hūn King Mihirkul. It is the *Sangala* of Alexander's historians, the *Sākala* of Ptolemy, the *Shākalhā* of the Chach-nāma, and the *Sangala wālatiba* of the present day. Taking the monograms under the king's arm as the names of satraps or governors, I think that it is much more probable that there were six or eight rulers of Sangala, than that so many chiefs of the *Sāka* tribe were employed under the Kushān kings.

II. GADAHARA and GADAKHARA.—I am not satisfied with the reading of the first half of the name as *Gāda*, although it has the support of Thomas. I notice that the first letter has a considerable upturn from its left member, and that the second letter may possibly be *R* with a turn to the left to connect it with a long *ā* over the next letter *H*. I should like to read the whole name as *Nagarahāra*, if there was any authority for taking the *upturn stroke* before *g* as a connected *n*. *Nagarahāra* was the name of the ancient city near Jalālābād, in the middle of the Kabul valley. It is the *Nagara* or *Dionysopolis* of Ptolemy; and one of these very coins was found by Masson in No. 10 Tope at Hidda close by, along with gold coins of Theo-

dosius II., Marcian, and Leo.²⁰ The only king's name noted by Thomas is *Kirada*, of whom I possess three specimens; but I have a single coin of a second king named *Peraya*. Of the *Gadakhara* or *Nagarahára* type I have two coins with the name of SAMUDRA in full under the arm. This reading of *Nagarahára* I offer with some hesitation as only tentative.

Thomas quotes the tribe of *Shanda* from the *Mahâbhârata* (*Ind. Ant.*, xii. 8); but they appear to be placed in the East, and I do not see how they could have struck coins in the Kabul valley. I think these *Shandas* may be identified with the *Shandus* of the Arrakan frontier, who are noted in the following paragraph:—

“The *Shendus*, on the northern frontier of the Arrakan hill tracts, have sent a challenge to Mr. Greenstreet, the Superintendent of Police at Akyab, to come out and fight; and no doubt (says an Indian paper) when that gentleman receives a reinforcement of the Karen levy, now on the way to Akyab, he will oblige them.” (*Homenward Mail*, December, 1892.)

III. ΡΑΚΑΝΨΗ (the *SHANDI* of Thomas).—This name has already been discussed. It may possibly be the full name of the district of *PAKHALI*, to the north of Râwal Pindi.

Mr. Thomas's paper in the *Indian Antiquary* for 1883 deals chiefly with the coins of the Class B.²¹ I have been able to add a few new names, Nos. 7, 9, and 11; and I have suggested a few different readings of some of the old names. On No. 13, for instance, I read *Bâshan* instead of *Bâsan*, as the sibilant is quite unmistakably the Gupta

²⁰ *Ariana Antiqua*, Pl. XVIII., 25.

²¹ *Indian Antiquary*, vol. xii. p. 8.

sh. I utterly reject his reading of the title of *Shandhi* on Nos. 12 and 13, for reasons already stated. I also reject his explanation of the female figure of *Ardokhsho* on the reverse as the Indian "Ardha-nâri, or half-male and half-female figure of the androgyne Siva." The figure is unmistakably a female only, with two breasts, and the usual female costume. She is, in fact, the goddess *Lakshmi*. The following table describes the names on all the coins of this class that have come under my notice.

Reverse, ΑΡΔΟΧϩΟ.

Pl. II. No.	King.	Obverse.			Reverse.
		Left.	Middle, under arm.	Right.	
1	Mi	Khai	Mi	Shâka	
2	Sita	Bha	Sita	Shâka	
3	Bha or Bhu	Te	Bha	Shâka	
4	Bhri	—	Bhri	Shâka	
5	Saya, Salya	Bha	Saya	Shâka	
6	Saya, Salya	Bha	Saya	Shâka	
7	—	Bha	—	Shâka	
8	Pra	—	Pra	Shâka	
9	Peraya	Kapan	Peraya	Gadahara	Sha
10	Kirada	Kapan	Kirada	Gadahara	Ghasha } Yasha }
11	Samudra	Pu	Samudra	Gadahara	
12	Bhadra	—	Bhadra	Pakalhdhi	
13	Bâshan	Nu	Bâshan	Pakalhdhi	

The two seals shown in Plate III. certainly belong to the Kushâns of the second or third century A.D., as they have Indian letters on them as well as Indo-Scythian Greek characters. These characteristics distinctly associate them with the coins of Plate I. of the same date.

In A.D. 630 the Chinese pilgrim Hwen Thsang, after passing through Samarkand and Darband, reached the

valley of the Oxus, which he describes as the country of the *Tu-ho-lo* or *Tokhari*, that is the Great *Yuēti* or *Kushāns*. Their language, he says, was slightly different from that of other peoples, while their alphabet consisted of twenty-five letters, which were written from left to right.²² This is a very important statement, as it points distinctly to the use of the Greek alphabet. We know from numerous coins and inscriptions that the *Kushāns* used three different alphabets—the *Gāndharian*, the Greek, and the Indian. The first of these is barred by being written from right to left, and the last is barred by the number of its letters which considerably exceed forty, while we know that it was not in use on the Oxus. This leaves only the Greek alphabet, which, excluding the *digamma* and the *koppa*, that were not used, and including the *sanpi*, or *sh* which was used by the *Kushāns*, consisted exactly of twenty-five letters, and was moreover written from left to right.

Some of the Indo-Scythic Greek characters have been much corrupted; but such as I have been able to recognise I have given at the bottom of the plate. Some of the letters are very little changed, as the **B** and **Z** in **BAZO** and in **BIZATO**. The **P** also retains its form, and is clearly distinguishable from **ƿ** or *sh*. The **A** becomes gradually a simple **O**, and so also does the **Δ**. The letters **H** and **N** become confounded with each other. The vowel **Y** is used in the name of *Huvishka* on the *Sarapo* coin, Pl. XXIII. 8, in **OOYOHƿKO**, which I read as *Houveshko*. It is also used in the name of the god **ƿAYPHOPO**, Pl. XXII. 9, which I read as *Shau-Reoro*. Gradually it became the fashion to link some of the letters, as **KO** and **NO** in *Kaneshko* and in *Kushāno*. Several

²² Beal's *Huen Thsang*, i. 88.

other letters are also linked, but I have not succeeded in making them out satisfactorily. I shall refer to the subject again in my account of the coins of the Scytho-Sassanians.

No. 1. Crystal seal. 0·825 in. by 0·625 in.

Male bust, with moustache and earrings, looking to the right. The hair is not bound with a diadem; but, in spite of this want, I think that the head is a royal one, as the Indian inscription on the left reads distinctly, SHÂNE, "the King," while that on the right, in corrupt Greek characters, certainly begins with the letter **پ**, or *sh*. I think that it may be read as *Sh·a·u·n·o*, or *Shahno*, being only a repetition of the Indian legend.

From this seal we get a direct proof that the abnormal letter **پ** actually does represent the Sanskrit letter *Sh* of the Sanskrit. Dr. Stein had already shown this from the names of *Kanishka*, *Huvishka*, and *Kushân*, as well as from the word **پAO** being used as the equivalent of the Greek **BACΙAEYC**.

No. 2. Nicolo seal. 1·4 in. by 1·05.

The larger seal, a fine nicolo, represents an Indo-Scythian prince in a standing position, doing reverence to the Indian god Vishnu. The god, who is standing to the front, has four arms. In the lower right hand he holds a club, as *gadâ-dhar*, and in the upper right hand a discus, as *chakra-dhar*. The lower left hand rests on a wheel, and the upper left hand a flower, perhaps the lotus. He wears a crown, and the Indian *dhoti*, or waist-cloth, and has both bracelets and armlets.

On his right hand stands the king, who is only half the height of the god, with hands clasped in adoration. The

head-dress of the Raja is a round jewelled helmet, similar to that worn by King Huvishka on several of his coins, with a crescent enclosing a dot on the side. (See *Ariana Antiqua*, Pl. XIII., figs. 2 and 9, and Prinsep's *Antiquities*, Pl. V., fig. 2, and Pl. XXIX., fig. 20.) In Plate I. I have given two specimens of these coins, No. 4, with reverse of **MAO**, and No. 5, with reverse of **MAACHNO**, with the same helmet. As a similar helmet is not worn by any of his successors, I feel inclined to assign this seal to Huvishka himself. This attribution is rendered probable by the fact that Huvishka had already published his devotion to the goddess **NANA** on the copper coin given in the plate as fig. 3.

The Indian letter between the figures I read as **KHAI**. A similar monogram name is seen on the coin, fig. 1 of Pl. II., with the letter **MI** under the arm, which is the position for the king's name. The coin is an early one, probably as early as 250 A.D.

The longer inscription, in corrupt Greek letters, to the right, I cannot read. But I see that it begins with **ΓΟΓΟ**, or **ΠοΠο**, in similar form to the same four characters on the Huvishka copper coin. The letter **Ρ**, or **SH** occurs, and so does the **P**, or **R**, to show that the letters are Greek.

There are a few other seals which may be assigned to the same period. As they have already appeared in my plates, it will be sufficient to refer briefly to them.

Kushān Plate XXI. 16. Agate seal.

Female figure, with modius on head, and cornucopia in left hand, exactly like the *Ardokhsho* of the coins. Right hand extended towards a child. Greek legend, **ΡΟΟΓΑΟ** = *Shao-Gao* = Queen of the Earth.

Kushān Plate XXI. 15. Sardonyx seal.

Female figure, with modius on head, and cornucopia in left hand, as on the last. A lunar crescent above, and a child behind. ΧΑΡΟΒΑΛΑΝΟ, *Khásho-Balano*.

Kushān Plate XXII. 18. Jacinth seal.

The goddess NANA, sitting, to front, on a recumbent lion. ΦΡΕΙΧΟΔΑΝΟ.

Kushān Plate XXII. 18. Agate seal.

The goddess NANA, seated, with crescent over head. Legend not read.

A. CUNNINGHAM.

X.

THE COINAGE OF THE NORMAN KINGS.

(See Plates XI., XII.)

No suggested arrangement of the coins of the two Williams and their successors in their proper order can be other than hypothetical. Two things, however, among others, are necessary for the sound establishment of a conclusion resulting from any such hypothesis—one, that the truth of the premisses or assumptions on which it is based should be fairly admitted and unassailable, and the other, that all the antecedent conditions which might affect it should have been duly taken into consideration. Now, in these two particulars the various theories on the subject, down to and including Mr. Crowther's¹ (which looked very tempting at first sight), are, as it seems to me, deficient. They assume that all the issues of the various types were successive and not contemporaneous. I venture to think that there are difficulties in the way of that assumption which seriously affect its credibility, and that the contrary is more certainly true. And further, in their examination of the types, they give their attention chiefly to the coins themselves and the moneymen, and only to a much less extent, if at all, to the dies and die-engravers with whom the types first originated. Doubt-

¹ *Num. Chron.*, 3rd ser., vol. xi., p. 25.

less there was a good deal in the skill of the individual moneyer: he must strike steadily, firmly, sharply, and clearly; but even as the egg precedes the chick (more certainly perhaps) does the die precede the coin, and in a question of this sort the former and its author are the first subjects for consideration. I therefore propose to consider the matter from the die-engraver's point of view. And first with regard to the theory of perpetually successive issues. We find coins of any given type equally well executed, and identical in design with the names of moneyers from all parts of the country on their reverses. It is quite beyond the bounds of probability that dies for striking them, so exactly alike, should have been engraved simultaneously at all these places, and it is therefore obvious that such dies emanated from a common centre. There they were engraved with each moneyer's name and town on the reverse, according to a list supplied to the engraver, and then sent out to the moneyers. The evidence of later times shows that several reverses were required by the process of coining for each obverse or pile; and this explains the reason why, in some cases, the name of the same moneyer is found spelt in different ways on the coins.

Now, the coinage of the Williams cannot be considered apart from those of their predecessor and successor, which even exceed it in variety. And considering the length of these four reigns, and the great number of types of the coins and other similar details, the notion of so many successive coinages or whole issues of fresh coins seems most improbable. A more important point is that, besides the fact of some types having common obverses or reverses (thus showing that they are exceptional and not representative of a universal issue), there are among those

of the Williams and Henry instances of one type being a copy, and a more or less degraded copy, of another. Such is the case with Hawkins (246)² and (257) as regards (243) and (262) respectively. It is impossible to believe that the wretched (257) was engraved by the same man, or his successors even, at the same centre as (262), and much the same is true in the other cases. But the argument for a successive issue of each type requires that those similar to each other should be near together in point of time; and such a sudden discrepancy in the art of the engraving at any one centre (and the theory requires this, for the type is to be adopted throughout the country) is equally incredible. Lastly, if moneyage, which was abolished by Henry I. in his charter, was, as some think, the Norman tax introduced into England at the Conquest, this tax was leviable and payable once in three years for the express purpose that the money might not be changed; whence it is an obvious inference that at least that period elapsed between each general change in the type of the coinage.

The conclusion, therefore, which I submit is that, while undoubtedly there was a successive issue of types to some extent during these reigns, it was not so thorough as has been contended for, but they were in a great measure contemporary; and that, though the dies of each type were engraved in one place, this was not the same place in all cases. In other words, that some types are the work of provincial engravers, sometimes copies, sometimes almost independent, of the London dies. Though London in size and wealth was the chief city of the kingdom, yet its pre-

² For convenience of reference the types, both in the text and in the accompanying plates, are denoted by the numbers given to them in the illustrations to Hawkins' *Silver Coins of England*.

eminence as the capital was not so marked, as it quickly afterwards came to be, in the Norman times and still less in those of the Confessor. Winchester ran it hard in such a dignity, and the goldsmiths of Winchester—possibly, also, especially in the earlier part of the century, those of such places as Canterbury, York, Lincoln, and Gloucester—were almost as likely as those of London to have the duty of engraving some of the dies for the king's coinage committed to them. That they were capable of it is shown by the baronial coins of the next century, which were certainly engraved in the provinces. It is not a serious objection to this theory that specimens of a type, supposed to have been engraved elsewhere, should be found struck by London moneyers, and *vice versa*. London had not at this time come so far to the front that the workmanship of other chief towns in England could not be introduced into and hold its own in it. As in a binary star system, though the components are of different magnitudes, yet the larger sun must receive a material portion of light and heat from the lesser, so the productions of Winchester penetrated to London just in the same way proportionately as those of London to Winchester.

The moneyers, besides, were a distinct class from the die-engravers, and it is, of course, probable that similar lists of, at least, the leading moneyers in each town in the country would be supplied to each engraver.

Nobody, I think, can fail to be struck with the goodness of the work of the coins at the time of the Conquest. The English coinage had always maintained a great deal of independence of foreign ideas in the matter of its types, in retaining, for instance, as a rule, the Roman busts on the obverse as well as in its generally superior work; but in the middle of the eleventh century there was a marked

improvement, especially in the portraiture of the king's head. Indeed, some of those of Harold II. and William, and the late ones of the Confessor, are, to my mind, surprisingly good considering the age.³ Rough as they are, the few lines sketch, not only the outline of features, but the characteristics also of each man's disposition as we know them from history. And, though at a somewhat lower level, this excellence can, as I contend, be shown to continue to the reign of Henry I., and even be traced in that of Stephen. Die-engraving was part of the "mystery" of goldsmiths, and the English goldsmiths, at the head of whom were those of London, were famous throughout the period for their work.⁴ There seems to me to be no ground at all for attributing the ruder types of coins specially to Rufus. As Professor Freeman has described them, his age and court were not rougher but much more luxurious and extravagant than those of his father and brother; while various opportunities for display and expenditure were afforded by the great architectural works, such as Westminster Hall and London Bridge, which he carried out. It would, moreover, be quite contrary to the law of progress in other arts to suppose that the rudely engraved coins can rightly be taken as representative of the reign of Rufus, coming between much better work of the time of Henry I. on the one side, and of William the Conqueror on the other.

Passing, then, to the types of the Williams as given and numbered in Hawkins,⁵ it will be noticed that there is a

³ Examples of this in the case of the five kings, Edward, Harold II., William I., William II., and Henry I., are shown in Plate XI., Figs. 1—5 respectively. (By an error on the plates, Hks. T. 4 (*obverse*) and No. 5 have been transposed).

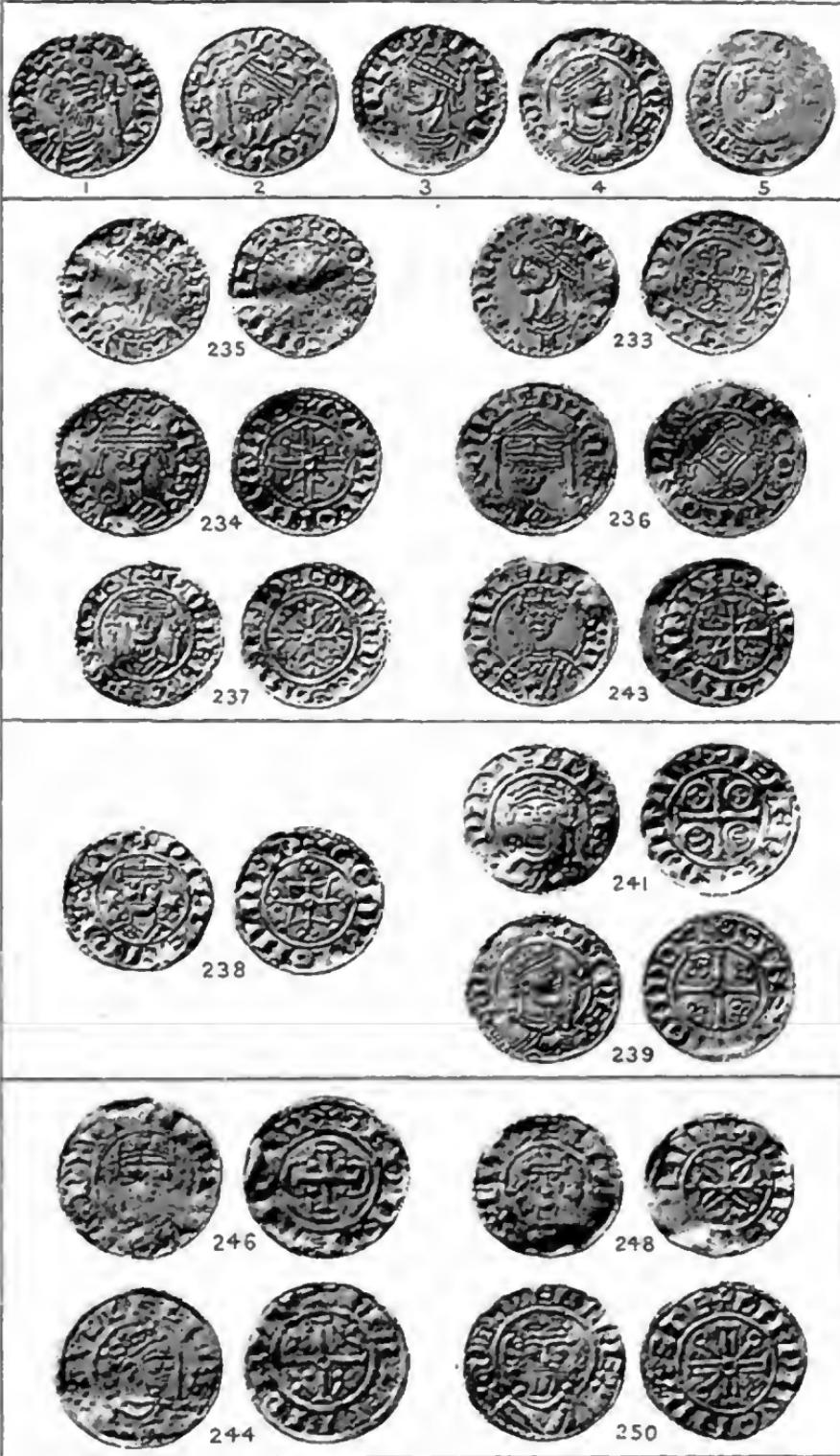
⁴ Freeman, *Norm. Cong.*, iv. 84-5, 721.

⁵ See Plate XI.

marked change in engraving and workmanship in the series after (243), (244)——(250) being much inferior in these respects to the preceding (233)——(243); and also, that all the types in the latter class are more or less imitations of some of those in the former. The argument, as I have said, is all against the idea that the bad work emanated from the same source as the good, and I, therefore, propose to consider Class II. as the work of engravers in some other towns, while Class I. represents that of those in London. Taking the specimens in Class I. and examining the style of their reverses and other little details, it will be found, I think, that they fall naturally into two parallel lines. I shall not object if it be contended that the whole class should be placed in one line of order of issue, or that it should be subdivided into three or more. I merely think that attempts to do so will meet with difficulties, and that they fall better, as I have said, into two. Nor do I mean that the types in one column necessarily succeeded their predecessors simultaneously with those in the other. It will be seen that those in column 2 are directly connected

Class I.—London.		Class II.—Other Towns. ^a		
Will. I.	1 (235) (234) (237)	2 (233) (236) (248)		
			(246) (247)	(249)
Will. II.		(241-2)		(248)
	(238)	(239-40)	(245) (244)	(250)

^a Types (240), (242), (245) and (247) are not illustrated in Plate XI., as they do not, for the present purposes, materially differ from those next them in the series. In both Plates XI.





260



Hks T4



255



264



265



266



262



263



267



266



267



251



254



255



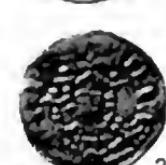
256



258



259



260



253



254



255



together by a floral ornament on the reverses, which is absent from those in column 1, though these, however, have almost an equally distinctive character. The three-pelleted, as well as the three-leaved, ending to the sceptre enters into the ornamentation of two of them. (These distinctive endings are shown on the obverses of (237) and (239) respectively.) The *Pax* type is rather a puzzle; both these ornamentations occur on its sceptre, while its peculiar reverse would not attract it to either column were it not brought by its connection through (240) with (239) to column 2. I have placed it where I have because I suggest as an explanation that it was a peculiar issue (the peculiarities of the Beaworth find have often been noticed), and that it was the type adopted on the accession of Rufus for the money given in alms for the repose of his father's soul. *Inter alia* every minster received six or ten marks of gold, every upland church sixty pennies, while a hundred pounds in money was sent into every shire on that occasion, to be given to the relief of the poor.⁷

The position of the figure is transitional between the full-face of (243) and the profile of (239). This latter is quite different from that of (233), and may, I think, certainly be given to Rufus, especially as on some specimens of this type, as well as on its derivative (244-5), one may almost detect traces of a beard. If this be so, it is conclusive, as what seems to have shocked respectable Normans more than anything else in his disreputable character was that he grew a beard! In column 1, as the two sceptres give (237) to the Conqueror, so the two stars

and XII., owing to requirements of space, the types in Class II., the sub-divisions of which are hardly more than arbitrary, are placed at the bottom below those in Class I.

⁷ *A.S. Chron., sub anno 1087.*

and somewhat broader face give (238) to Rufus. In Class II. the types are merely arranged in columns according to their reverses, (246) and (247) being both evidently copies of (243), while (244), (249), and (250) may be traced to (239), (237), and (238) respectively. (248) is anomalous, but may be a reminiscence of the *Pax* type. The three-leaved sceptre is in favour of its belonging to Rufus.

I do not feel competent to make much of a suggestion as to the localities at which they may have been engraved. Another find, such as that at Beaworth, might upset any deduction made from the distribution of a typo according to the list given in Hawkins of the mints from whence the specimens have been found. Still, a slight argument may perhaps be drawn from the average of these, and it may be noticed that, as far as it goes, it is in favour of the main division which I have proposed; types in Class I. being found, as a whole, more widely and generally distributed throughout the country than those in Class II. Two of the latter, however, (246) and (244), have a wider range than any, except, of course, the *Pax* type; but the others (247)-(250) show a tendency to localisation in the east and south, being, as regards the smaller mint towns, confined to those of Kent, though occurring also, especially (250), at many of the county and principal market towns in the country. There is, besides, a curious tendency in (246) and (244), (and also to a less extent in (237) and (238),) to occur together in pairs at the various mints; and, having regard to their wide distribution and their connection through (245), I am inclined to think that their origin is probably Winchester, while (249) and (250) I would attribute to Southwark or Canterbury. The matter of the substitution of the sword in (244) for

the sceptre in its original (239) is, according to my theory, explicable on the ground that the author of (244) had been the engraver of (246), and that he merely followed his own previous work in this detail; and he may have had a reason for it, a reason which may throw light on its introduction on types (243) and (246) in the middle of the Conqueror's reign. The great event which stirred men's minds at that time was the execution of Waltheof, the last English earl, in 1076, at Winchester; and the sword in William's hand represents this decisive act of justice or tyranny, according as it was looked on by different people. It is quite possible that in this case (246) is the original design, and (243) the London copy. The death of Waltheof was not likely to have been forgotten at Winchester when the engraver took the dies for (246) in hand.

When we come to the reign of Henry I., though the dies of the superior, or London, engraving can, I think, be fairly easily distinguished, I have yet much doubt as to the accuracy with which the double line of these can be continued. Still I propose the following, in which some points are fairly clear:—

Class I.—London.		Class II.—Other Towns. ²			
¹ (260-1)	² (Hkns., No. 4; ³ Rud., Supp. i. 6)	(254)		(251)	(258)
(255)	(265)	(256)	(264)	(252)	
(262)	(268)	(258)	(257)		
(266)	(267)				

¹ See Plate XII.

² There is no illustration of this coin in Hawkins, and consequently it has no regular number.

Here the reverses of (260-1) and (255), as well as the obverse of the former, closely connect them with (238). Similarly those of (Hkns. No. 4) and (265), besides the general excellence of the work of the latter and of the portraiture on its obverse, recall the floral ornament and arrangements of (233), (236), and (239). The obverse of (262) connects it with (255), while the remarkable crown is more carefully given with a reminiscence of that on the *Pax* pennies in (263), whose reverse again is of the class of (265). (267) follows (263), and the floral ornament appears still more markedly on the reverse, while that of (266) is of the more independent character which is usual in column 1. Chaos rather meets any attempt to arrange the remaining types, which I give to other places, but (254), which is a degraded copy of (233), has evidently followers and connections in (256) and (258). (251) and (252) probably come from the same workshop as the earlier (250). (253) is anomalous; its obverse connects it with (Hkns. No. 4), but the *Pax* on the reverse would suggest that the author had one of Harold's coins before him. Possibly he was the engraver of (248). (257) is a degraded imitation of (262); and the same may be said of (264) in reference to (265); its reverse, of course, connects this latter with (256). The coin which Hawkins gives as (259) must be set down either as belonging to Henry II., or as a baronial one. If it be thought that there is an appearance of better work in some specimens, such as (253) and (264), yet their anomaly in size is, I think, against them. The regular engravers would not be likely to alter the proper size of the dies, which would be a deliberate encouragement to a fraud from which they could reap no benefit. The notorious corruption of the money and the moneyers in

Henry's reign will answer any objection on account of my leaving the class of provincial work in such unexplained disorder. In every large town moneyers and goldsmiths lived side by side, and at a time when the coin was so utterly corrupt any unprincipled moneyer could easily get rude dies engraved for inferior coins which had, more or less, probably, a local circulation. As to this, Hawkins's analysis of the mint towns and types is, of course, owing to the rarity of the coins, less full than that of those of the previous reign, but, like the former, it confirms the main division given above, showing that the dies in Class I. were more widely distributed. (266) and (267) seem to have been introduced after the punishment of the moneyers in 1125, when the type was changed, and doubtless all the other types abolished; and they carry us on to the two principal types of Stephen. Any difficulty which may occur to us as arising from the idea of three or four types of the coins being current contemporaneously during these reigns will disappear when it is remembered that such a state of things prevailed at this time on the Continent with the various local issues. An investigation of the names of the moneyers of each type in each mint (which I have had neither time nor opportunity for) would materially test the above theory. It would not be conclusive against it if the same moneyer's name were found now and then on two hypothetically contemporary types, for it is, of course, conceivable that he might have received and used dies from two different engravers; but if, on the contrary, it appeared that in the case of such types one set of moneyers, as a rule, used one, and another set the other, in the same town, this would very strongly, I think, confirm its truth.

In conclusion, can anything be said as to the engr-

vers themselves? Not much, perhaps; but something can. Domesday Book tells us of two leading goldsmiths, one of whom certainly was an engraver of coin dies, while the other seemingly had been rather longer settled in England. Otto, the goldsmith, in 1086, held Glestingethorp, or Gestingthorp, near Hedingham, in Essex, with one or two other small tenancies, under the King. He also, in conjunction with William the Chamberlain, held some lands in Suffolk or Cambridgeshire as Steward for the King. He thus acted as one of the King's reeves, whose unpopularity, according to the history, became rather general. He was, however, a famous goldsmith, and made the ornaments for the tomb of the Conqueror at Caen.¹⁰ Ruding gives an account of his descendants, who were hereditary *cuneatores*, or engravers to the Mint, and I subjoin the somewhat more detailed pedigree which I have made out. He is said to have been a coin engraver in the reign of Rufus, and his son, Otto Fitz Otho, was appointed engraver some time before the year 1107.

Theodoric¹¹ the goldsmith also occurs in Domesday among the King's thanes and servants. He held Kennington, in Surrey, close to London, besides four manors in Berkshire and three in Oxfordshire; but he had also held Kennington in the time of the Confessor; and the same was the case with one of the Berkshire and two of the Oxfordshire manors, which latter, however, had then been the property of his wife. Thus he was settled and well-to-do before the Conquest, and his position was not apparently inferior to that of Otto. Whether to these two goldsmiths, both attached to the Court—one with his

¹⁰ Freeman, *Norm. Conq.*, iv. 721.

¹¹ For Theodoric, see Freeman, *ibid.*, p. 41.

connection reaching back to Edward the Confessor, and the other with his fame extending to Normandy—can be attributed that distinction in the engraving of the London dies which I have tried to point out, I must leave to be considered. Both, as their names betoken, were of German extraction, and a reference to Dannenberg's plates will show that in several instances there is an affinity between the Norman types and some of those of the Franconian emperors of the first half of the century. (236) is evidently a reminiscence of the Continental "temple" type, while the large and peculiar-shaped crowns, such as these of (234), (262) and the *Pax* type, find their prototypes on the German coins. With these latter, also, reverses of the style of the *Pax* type occur in several instances, and the actual letters in the angles are found in the case of a coin of Trier of Conrad.¹² There was a German influence, therefore, affecting the English die-engraving, doubtless attributable to German goldsmiths having been among the foreigners who were attracted to England under the auspices of Edward the Confessor.

I began by intimating that all hypothetical arrangements were more or less open to attack. I leave this one, so especially hypothetical, as much as any of its predecessors to the assaults and confutation of criticism.

A. E. Packe.

P.S.—The concluding invitation was accepted for a few moments at the time that this paper was read by some of

¹² *Dannenberg*, Pl. XX., No. 467. See also coins of Conrad, Henry II. and Henry III., in Pl. XXIX. (Goslar), XXXIII. (Dortmund), XXXVI. (Spires), XXXVII. (Worms), XL. (Strasburg), and XLVII., LIII., LIV.

those present. It seemed to me that the criticism was rather directed to subordinate points, and that the main positions were generally agreed to: namely, that the coins of some types were issued contemporarily, that the dies for each type were made at some one centre, and further, that the workmanship and style showed that the types could be classed, and that the dies for different ones were made by two or more different goldsmiths and their assistants or successors. This is really all that I contend for. Any suggestions as to the locality of these makers, and other distinctions, are, of course, merely founded on the logically valueless inference from historical probability and from the simple enumeration of extant specimens. It has not been an essential point of my argument that a certain die was made in a certain town, whether London or any other place. All that I urge is, that dies of similar style and workmanship must have come from the same source, and that one of rude work did not come from the same as one of fine work. That the finer work came from London and the ruder from elsewhere is simply a question of historical probability. The endeavour to more clearly ascertain these other places merely depends on that probability, and also on an examination of the types and of the extant coins.

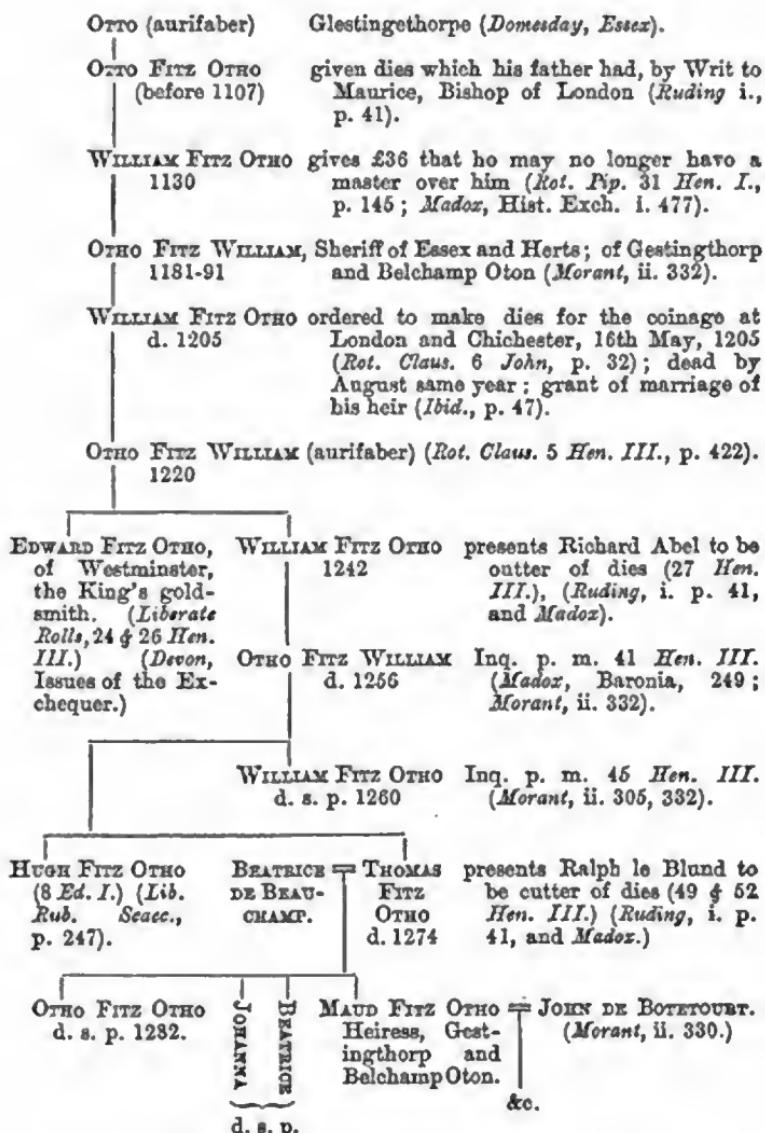
As I have said, it may be much affected by an analysis of the moneyers in the principal towns, or by a fresh find of coins. By comparing their reverses and details, the various types can be brought together in certain classes, of each of which, it is probable, there was a different author or line of authors. Whether those authors were resident, like the moneyers, in certain places, or travelled about with the King, is open to discussion. The

occurrence of remarkable "mules" is in favour of some of the issues being contemporary, for, by tending to bring them together, it is opposed, *a fortiori*, to the successive issue theory. But I do not think that much can be inferred from such an occurrence. With the number of moneymen then existing, and consequently large supply of dies, there must often have been some of one type remaining over in the moneymen's workshop, and used, by accident or on an emergency, concurrently with those of a newer one; especially as several reverses, where the moneymen's name was, were supplied for each "pile." With regard to the *Pax* type, the fact of the find having been made near Winchester, inasmuch as the coins found were struck in all parts of the country, proves nothing as to the locality of the centre where the dies were made. In support of my suggested explanation, I would merely say that it is at least noticeable that, while, on the one hand, we do know of one particular occasion in the period, on which large apportioned sums of coined money were distributed throughout the country, there should, on the other, be found a large sum (about £50 worth) of pennies nearly all of one, and that a peculiar type, all freshly struck and from an immense number of moneymen in all parts (this last point showing, I think, that there had been a sudden demand for a large amount of current coin). The word *Pax* had a religious meaning, and its previous appearance on coins of Cnut, Edward the Confessor, and Harold may refer in each case to the condition of pious or saintly predecessors, namely, Edmund of East Anglia, Edward the Martyr, and the Confessor himself, to whom they sought to show reverence. Such a reference is supported by the use of the word by Conrad the Salic, the successor of the Emperor Henry II. (afterwards canonized as St. Henry of Bavaria). Un-

doubtedly a type once introduced was often repeated meaninglessly, but the word on coins of Harold I. and Rufus may, after the above examples, be perhaps fairly applied to their fathers. The addition of the right arm and elbow to the bust on the *Pax* type of coins, and the imitation of this feature on some of those which succeeded it, are worth remarking. Lastly, though I feel that it is a very hardy and rash thing to dissent from the President's opinion—an opinion which makes mine so exceedingly likely to be wrong that I cannot expect to persuade others—I yet cannot help thinking that there is an attempt at portraiture in the heads on these coins; more or less feeble, if you will, or more or less successful; the very variety of types is, to my mind, against the notion of a conventional head. A conventional head would have at once tended to become uniform and universal. And this was, in fact, the case when, after the anarchy, portraiture having, as I must admit, shown signs of being almost extinct on the coins of Henry II., conventionality of treatment of both obverse and reverse, a characteristic of the Continental school of Tours, was introduced into England from that place by Aymary in 1180.

A. E. P.

PEDIGREE OF FITZ OTHO.*



* See *Morant's Essex*, Glestingthorp, ii. 305, and Belchamp Oton, ii. 330; *Madox, Hist. of Exchequer*, &c.

NOTICES OF RECENT NUMISMATIC PUBLICATIONS.

The *Revue Numismatique*, Part I., 1893, contains the following articles :—

1. REINACH (Th.). The origin of bimetallism. An essay on the proportional value of gold and silver in Greek antiquity. This article is especially well-timed at the present moment, when the feasibility of raising and steadyng the value of the silver currency throughout the world by a general return to the time-honoured system of bimetallism is so strongly upheld by one section of political economists and so vehemently denounced by another.

By a juxtaposition of all the original documentary evidence at his disposal, M. Reinach demonstrates that the relative value of the precious metals among the Greeks varied very considerably in the course of their history, and that we are almost always able to explain the causes of these variations. In European Greece, down to the middle of the fourth century B.C., monometallism was universal, all values being reckoned in silver.

Persian gold daries and electrum coins of Asia Minor were accepted in European Greece simply as merchandise, although their exchange values as against silver were legally fixed throughout the Persian Empire and its dependent provinces; bimetallism in the proportion of 13·3 : 1, as between gold and silver, having been obligatory in the East from the earliest times down to the fall of the Persian Empire; 1 gold daric of 180 grs. having been everywhere tariffed at 20 silver sigli of about 86·5 grs. The value of electrum in comparison with silver seems also to have been fixed by law or custom at 10 : 1 in Asia Minor.

In European Greece, where bimetallism was not yet established, the price of gold at Athens in the latter part of the fifth century, owing to its scarcity, stood as high as 14 : 1; but before the end of the century, principally in consequence of the influx of Persian gold into the West, it had already fallen to

12:1. At this figure it stood when Athens, in 408-7 n.c., first issued gold money and adopted the principle of bimetallism, the value of the Athenian gold stater being fixed at 24 silver drachms, and that of its subdivisions at 12, 8, 6, and 4 drachms respectively, which gives a ratio of 12:1. This ratio between the two metals in European Greece seems to have been constant until Philip of Macedon, in b.c. 356, began to work the rich gold-mines of Mount Pangaeum, and to flood the market with his famous gold staters. Such a rapid augmentation of the stock of gold in circulation had the immediate effect of bringing down its price in silver from 12:1 to 10:1.

Philip's currency, like that of Athens, was bimetallic, and his gold stater, after the Athenian model, was made legally equivalent to 24 silver drachms, though these latter, weighing about 56 grs. (Phoenician standard), were, owing to the fall in the value of gold, of course considerably lighter than the Attic drachms, which weighed about 67 grs.

The Phoenician standard for the Macedonian silver coins thus appears to have been deliberately adopted by Philip for the express purpose of maintaining the same equivalence of exchange between his gold stater and his silver drachm (1 = 24) as had been customary on the Athenian market for half a century before his time; in other words, while gold had been kept up to 12:1.

The conquest of Asia by Alexander does not seem to have produced the slightest effect upon the proportional values of gold and silver in European Greece; for, although he laid his hands upon countless treasures of both metals, there is nothing to lead us to infer that the mass of gold then thrown into circulation was proportionally larger than that of silver, as it had certainly been in Philip's time when he opened up his gold-mines. There can be no doubt, however, that the Asiatic ratio of 13.3:1, which had for so many ages been artificially maintained by means of the ancient bimetallic system throughout the Persian Empire, finally broke down when Alexander overran the East, and that henceforth the European ratio of 10:1 became universal in Asia, as it had already become thirty years earlier in Europe.

The bimetallic system, by means of which the relationship between the gold and silver currency had been fixed and kept steady, had, however, become so firmly rooted by long-established law and custom throughout the Persian Empire—in which from the earliest times 1 gold daric of 130 grs. had been always equivalent to 20 silver sigli of about 86.5 grs. under the old ratio of 13.3:1—that, when Alexander found himself compelled to reorganise his coinage on the new basis of 10:1, he was

obliged to make his new gold stater, like the old daric, equivalent to 20 silver drachms, instead of to 24, the equivalence which his father, following the example of Athens, had adopted for his gold "Philippi." Consequently, as the weights of the gold staters remained unchanged, Alexander's new silver coins had to be assimilated in weight to his gold coins, in order that his gold stater of 185 grs. might pass for 20 silver drachms of 67·5 grs. The necessity of maintaining the time-honoured bimetallic system and the decimal currency according to Asiatic usage thus satisfactorily accounts for the abandonment by Alexander of the Philippic (or Phœnician) silver drachms of 56 grs. (24 of which equal 1 Δ stater), and for his adoption in its stead of the Attic silver drachm of 67·5 grs. (20 of which equal 1 Δ stater). It will thus be seen that the relationship between gold and silver, after having been 14 : 1 in European Greece, had fallen in the time of Pericles, before B.C. 400, to 12 : 1, and subsequently to 10 : 1 in the reign of Philip of Macedon, during all which time a uniform rate of 13·3 : 1 had been maintained in Asia, owing to the legal establishment there of the bimetallic system.

2. MOWAT (R.). Ptolemaic monetary symbols, illustrated by the Dionysiac Festivals at Alexandria.

The writer thinks that the Ptolemaic gold coins, as distinguished from the ordinary silver and bronze currency, were only issued at the time of the great quinquennialian festivals of Dionysos, and that the various symbols which they bear represent the objects borne in procession on those occasions.

4. BLANCHET (J. A.). Unpublished or little-known Roman and Byzantine coins recently acquired by the Bibliothèque Nationale.

5. TACCHELLA (D. E.). Greek Imperial coins found in Bulgaria in 1891. This important find, in addition to a few Roman denarii, comprised no less than 640 Imperial coins, chiefly of Tomi and a few other neighbouring towns, among which are as many as 144 types not described in Mionnet.

Notwithstanding this fact it is interesting to note that there are no new names of Consular Legati ($\iota\pi\alpha\tau\alpha\kappa\omega\iota$) on the coins of Marcianopolis to be added to those already published in the Berlin catalogue. On p. 77 the compiler has attributed to Trajanopolis (ad Hebrum) a coin of Sept. Severus, bearing the name of the Praeses ($\chi\iota\mu\kappa\omega\iota$) Sicinnius Clarus, which belongs in reality to Augusta Trajana, the modern Eski-Zaghra (see Foucart in the *Bull. de Corr. Hell.* vi. (1882), p. 179, and Mommsen, *Röm. Gesch.* v., 282).

6. VAUVILLÉ (O.). Coins of Soissons. Description of a Merovingian Triens, reading on the obverse SVESSIONIS

FITOR, and on the reverse, apparently, MONETA E STI MEDARDI, which the author believes to have been issued by the Abbey of St. Medard at Soissons. Also of a number of silver deniers and smaller coins of billon, struck at Soissons in the twelfth century.

7. TOUR (H. DE LA). Pietro da Milano. The writer identifies the author of a few extremely rare medals executed for René Duke of Anjou and his family, with the famous architect and sculptor of the same name, who was held in great honour by the Kings of Naples, and who directed the works of the great triumphal arch of Castelnuovo, erected between the years 1458 and 1467, with an interruption which corresponds with the period during which M. de la Tour supposes that the artist visited the Court of René of Anjou.

BARCLAY V. HEAD.

Fragments Numismatiques sur le Canton d'Argovie. Par B. Reber, Genève. 1890. 8vo, pp. 88, 30 Pl.

The little Swiss Canton of Aargau, with an area of about five hundred square miles, being considerably less than that of most English counties, does not at first sight appear to furnish promising material for a numismatic treatise, and yet M. Reber, the *Bibliothécaire-archiviste* of the Swiss Numismatic Society, has managed to produce from it a work not only of local but of some general interest. As at present constituted the Canton dates from 1803 only, but it contains within its limits the ancient town of Windisch, the Roman Vindonissa, the two little free districts of Bremgarten and Mellingen, the more important towns of Baden and Zofingen, also not improbably on Roman sites, and the convents of Muri and Wettingen. The author adopts the principle of placing the medals of the Canton first and the coins second, and amply illustrates both series with plates partly photographic and partly lithographic. The medals given as school-prizes are in some respects remarkable, as one of those given at Baden dates back to 1683, and presents a remarkably well executed Virgin and Child on the obverse, while one of Brugg gives the date 1657, and at Zofingen one dated 1627 occurs. The local wars of Toggenbourg and Villmergen in 1712 have left their medals, as has also the Peace of Rastadt, which was negotiated at Baden in 1714. The convents of Muri and Wettingen claimed the right of coinage even in gold, and there is a fine medal of Christopher, Abbot of Wettingen, dated 1591. Another Jubilee medal of Henry

Bullinger, the reformer, engraved by J. J. Gessner in 1719, may also be mentioned. The bracteates of Zoffingen and Laufembourg, with their successors of the sixteenth to the eighteenth centuries, form the principal subject of the part of the work devoted to coins, but into the details of this it is needless to enter. We commend the book as an example showing the amount of interest that may attach to the numismatic history of even a small district, and as a model of the manner in which the subject may be treated. Should any readers of the *Chronicle* possess specimens of coins or medals of the Aargau not described in this treatise, they are requested to send particulars to M. B. Reber, pharmacien, Geneva.

J. E.

MISCELLANEA.

ORDER IN COUNCIL AND ROYAL PROCLAMATION GIVING CURRENCY TO COINS OF NEW DESIGNS.

At the Court at Osborne House, Isle of Wight, the 80th day of January, 1803.

PRESENT,

The QUEEN'S Most Excellent Majesty in Council.

WHEREAS there was this day read at the Board the Draft of a Proclamation for giving currency to certain gold and silver coins, with a new design therein described:

Her Majesty, having taken the same into consideration, was pleased, by and with the advice of Her Privy Council, to approve thereof, and to order, and it is hereby ordered, that the coins described in the Proclamation be coined at Her Majesty's Mint:

And the Lords Commissioners of Her Majesty's Treasury are to give the necessary directions accordingly.

HERBERT M. SUFT.

By the QUEEN.

A PROCLAMATION.

VICTORIA R.

WHEREAS by an Act passed in the thirty-third year of Our Reign, intituled "An Act to consolidate and amend the law

relating to the Coinage and Her Majesty's Mint," it is amongst other things enacted :

That Wo, by and with the advice of Our Privy Council, shall from time to time by Proclamation determine the design for any coin :

We have, therefore, thought fit to order that certain of the coins made at Our Mint, mentioned in the First Schedule to the aforesaid Act, of the weight and fineness specified in that Schedule, shall bear designs as follows :—

That every Five Pound Piece shall have for the obverse impression Our effigy, with the inscription "Victoria Dei Gra. Britt. Regina Fid. Def. Ind. Imp.", and for the reverse the image of Saint George armed, sitting on horse-back, attacking the Dragon with a sword, and a broken spear upon the ground, and the date of the year, with a graining upon the edge; and that every Two Pound Piece should have the same obverse and reverse impression and inscription in all respects as the Five Pound Piece, with a graining upon the edge; and that every Sovereign should have the same obverse and reverse impression and inscription in all respects as the Five Pound Piece, with a graining upon the edge; and that every Half-Sovereign should have the same obverse and reverse impression and inscription in all respects as the Five Pound Piece, with a graining upon the edge; and that every Crown should have the same obverse and reverse impression and inscription in all respects as the Five Pound Piece, and on the edge of the Piece in raised letters "Decus et Tutamen Anno Regni," the Year of the Reign being in Roman Numeral Letters; and that every Half-crown should have for the obverse impression the aforesaid Effigy, with the inscription "Victoria Dei Gra. Britt. Reg." and for the reverse the Ensigns Armorial of the United Kingdom contained in a Shield surmounted by the Royal Crown and surrounded by the Collar of the Garter, with the inscription "Fid. Def. Ind. Imp." together with the words "Half-crown," and the date of the year, with a graining upon the edge; and that every Florin should have the same obverse impression and inscription in all respects as the Five Pound Piece, and for the reverse two Royal Sceptres in saltire behind three Shields, the Shield on the dexter, in bend, bearing the Arms of England, that on the sinister, in bend sinister, Scotland, and that in base Ireland; between them the three Emblems, the Rose, the Thistle, and the Shamrock, each shield surmounted by the Royal Crown, the Garter, bearing the motto "Honi soit qui mal y pense," underlying the whole; and the words "One Florin. Two shillings," and the date of the year, with a graining upon the edge; and that every Shilling should have the same obverse impression and inscription in all respects as the Five Pound Piece, and for the

reverse three Shields, that on the dexter bearing the Arms of England, that on the sinister Scotland, and that in base Ireland, each surmounted by the Royal Crown; between them the three Emblems, the Rose, the Thistle, and the Shamrock, the Garter, bearing the motto "Honi soit qui mal y pense," underlying the whole, and the words "One Shilling," and the date of the year, with a graining upon the edge; and that every Sixpence should have the same obverse impression and inscription in all respects as the Five Pound Piece, and for the reverse the words "Six Pence" placed in the centre of the piece, having an Olive Branch on one side and an Oak Branch on the other, surmounted by the Royal Crown, and the date of the year between and below the branches, with a graining upon the edge; and that certain other pieces of silver money, called "The Queen's Maundy Monies," of Fourpence, Threepence, Twopence and One Penny, should have the same obverse impression and inscription in all respects as the Five Pound Piece, and for the reverse the respective figures "4," "8," "2," "1" (according to the denomination or value of the piece) in the centre, with the date of the year placed across the figure, and encircled by an Oak Wreath surmounted by the Royal Crown, with a plain edge:

And whereas pieces of money of the above descriptions respectively have been coined at Our Mint, and will be coined there and, so far as relates to gold coins, at Our Branch Mints, in pursuance of Orders which We have given for that purpose, We have, therefore, by and with the advice of Our Privy Council, thought fit to issue this Our Royal Proclamation, and We do hereby ordain, declare, and command that the said pieces of money respectively so coined, and to be coined as aforesaid, shall be current and lawful money of the United Kingdom of Great Britain and Ireland, and that this Our Royal Proclamation shall come into operation in the United Kingdom from the date on which it is published in the London Gazette, and in the Colonies of New South Wales and Victoria from the date on which it is published by the Governors of those Colonies respectively.

Given at Our Court at *Osborne House, Isle of Wight*, this thirtieth day of January, in the year of Our Lord one thousand eight hundred and ninety-three, and in the fifty-sixth year of Our Reign.

GOD save the QUEEN.

XI.

ON COINS RECENTLY ATTRIBUTED TO ERETRIA.

(LETTER TO MR. BARCLAY V. HEAD, D.C.L., PH.D., KEEPER OF COINS, BRITISH MUSEUM.)

MY DEAR HEAD,—It is a rash thing, I know, to differ from you on a question of Greek numismatics, but, having recently been writing a memoir on Pisistratus and his times, I have arrived at some conclusions not quite consistent with yours, and I venture, with due deference, to state them.

In the first place you state in your *Historia Numorum*, p. 287, that the weight standard of the money of Phocis is Æginetic, and this opinion, I believe, is widely accepted. Is the matter, however, quite clear? It seems to me that on *a priori* grounds the standard used in Phocis would be quite as probably the Corinthian as the Æginetic, if not more so, and that the Phocian money, like that of Corinth, consisted of staters divided into thirds, sixths, &c., and not into halves. In your account of the Phocian money in the work just cited you do not give any staters, but, if my contention be right, I cannot see how you can reasonably separate from the Phocian coins the coin given to Eretria in your *Catalogue of the Coins of Central Greece*, p. 120, No. 13, Pl. XXII. 5. The type of this coin is precisely that of the early coins

of Phocis with the bull's head facing, of a massive type, with projecting globular eyes, &c., &c.; and the only reason that I can see why it should have been given to Eretria is its weight, namely 133.7 grs., which I understand that you suppose marks it out as of Æginetic standard. This I altogether fail to see, for on turning to your table of the weights of Corinthian coins in the period before B.C. 500 I find you give the maximum 136.6, and the minimum 122.2, and the normal 135. If we turn to the smaller dimensions we shall find that the coins of Phocis in the earliest period, ranging from 600 to 480 B.C., consist first of what you style triobols or hemidrachms, but which I would call drachms or tritae, ranging in weight from a maximum of 48.8, which seems to have been an unusually heavy specimen, down to 44.7, and you give the normal weight of the Corinthian drachm, or tritæ, as 45.

Turning to the next denomination of Phocian coins, which you style trihemiobols or quarter drachms, but which I prefer to call hemidrachms, I find you only mention one in your catalogue of Phocian money; and you give its weight as being 22.5, which is precisely the normal weight of the Corinthian hemidrachms.

Of the next denomination of Phocian money, which you style obols, you give no specimen at all from the primitive period which we are now discussing, but, curiously enough, you do give four coins, two of which weigh 7.7 grs., and two others 7.5, and which do answer very closely to the normal weight which you assign to the Corinthian obols.

For these reasons I am disposed to suggest tentatively that the Phocians in early times followed the Corinthian standard, and that the stater with the bull's head to which I have referred belongs to Phocis, and not to Eretria.

I will now turn to a much more important matter,

namely, to the attribution of a series of primitive coins marked with a Gorgon's head on one side and on the other either with an incuse square diagonally divided, or with a lion's head and paws facing, which were formerly attributed to Athens, and which you have recently assigned to Eretria. I am bound to say that I cannot see my way to accepting this conclusion.

We shall agree, I think, that in early times when coinage was very closely connected with the temples, and the types were so generally, if not universally, religious, it was a very unusual and a very difficult matter suddenly and completely to change the types of the coins, and that to postulate such a change without some strong and positive evidence is a dangerous way of escaping from a difficulty.

Now, you admit that the coinage of Eretria from the year 480—445 B.C. is marked by a very conspicuous type, namely, that of the Cuttle-fish, which was so well recognised as the Eretrian symbol that Themistocles compared the Eretrians to cuttle-fish. This being the recognised type of the town what evidence is there of any kind that the Eretrians ever had coins with a different and earlier type, and that they changed this earlier type for that of the cuttle-fish? I know of none.

You argue that it is highly improbable that a town so important as Eretria, which was a great mother of colonies, should have had no coins before the time of the Persian wars, and since no other coins can with any likelihood be assigned to Eretria, except the coins in question, you urge that this is a *prima facie* case in favour of your contention, but surely this ignores the fact that Eretria was a famous mother of colonies, not in the sixth, but in the seventh century B.C. Her history afterwards was a disas-

trous one. She fought with Chalcis, and was badly beaten, and she lost her settlements elsewhere ; and if this were not so it would only amount to negative evidence of a very fragile kind, and yet this, so far as I know, is the only evidence forthcoming. There is no pretence for saying that these coins have been chiefly, or commonly, found in Eubœa, but the reverse. I know of no case in which they have been found in that island, while they commonly occur in Attica ; nor can I see what possible connection there can be between the Gorgon's head and the local worship of Eretria, and certainly not with the cult of Artemis Amarynthia, as suggested on p. 306 of the *Historia Numorum*. I cannot see, therefore, any positive reasons whatever for treating these coins as Eretrian or Eubœan. On the other hand, there seem to me to be the strongest reasons for reverting to the old view maintained by Beulé and others, that these coins were the primitive money of Athens. As I have said, they have been chiefly found in Attica ; they are, no doubt, of the Euboic standard, which Mommsen has shown was that used at Athens ; the Gorgon's head is the recognised symbol of the great Athenian goddess Athena. Lastly, we have the positive statement that Hippias, the son of Pisistratus, called in and reissued the Athenian monoy and impressed it with a new type, and this cannot assuredly mean that he made the head of Athena a little less archaic ; on the contrary, it seems to me to be most clear that what Hippias did was to change the type of the Athenian money from a Gorgon's head on the one side and the lion's on the other, to the head of Athena on the obverse and an owl with a sprig of olive on the other, and that all the coins with the latter types must be placed after the accession of Hippias. I would mention

an interesting confirmation of this which seems to me nearly conclusive. We learn from the recently discovered work on the polity of Athens that Pisistratus founded a colony near the river Strymon; this colony was doubtless the town called Neapolis, which we know was an Athenian settlement. Now, it is curious that on the earliest coinage of this city we should have a Gorgon's head; one of them has the letter A upon it, doubtless referring to its connection with Athens. The Gorgon's head in this case is assuredly to be explained by what we find to be the case elsewhere, namely, the adoption of the type of the mother city by the colony. The evidence, therefore, seems uniform and converging that the coins with the Gorgon's head on one side and the lion's on the other should be given back to Athens, and represent the Athenian coinage before the year B.C. 526.

Yours very truly,

HENRY H. HOWORTH.

ATHENAEUM CLUB,
July 1st, 1893.

XII.

ON COINS RECENTLY ATTRIBUTED TO ERETRIA.

(REPLY TO LETTER OF SIR HENRY HOWORTH, K.C.I.E.,
M.P., F.R.S., F.S.A.)

MY DEAR HOWORTH,—As you have done me the honour to address to me your interesting letter on the subject of the attribution of certain archaic coins to Eubœa, and to state your reasons for adhering in the main to Beulé's opinion that these coins really belong for the most part to Athens, I feel bound to recapitulate my reasons for assigning them, as Dr. Imhoof-Blumer and Professor Ernst Curtius have already done before me, to the ancient Eubœan cities, although I am sensible that either of these distinguished numismatists would have been far better able than I am to defend their attribution.

In the first portion of your letter you express your doubts as to whether the weight standard of the early coins of Phocis is the Æginetic standard, and you incline to the belief that the Phocian coins are in reality drachms of the Corinthian system. Now this is a view which, so far as I remember, has never yet been advanced by any writer on numismatic metrology, and in my judgment it is not a tenable hypothesis.

That the money of Phocis is of the Æginetic and not of the Euboic or Corinthian standard may, I think, be proved by the fact, that of the 29 specimens of what I call Æginetic hemidrachms of Phocis in the British

Museum, no fewer than 15 exceed 45 grains, which is the maximum weight of the Corinthian drachm and of the Euboic tetrobol, a weight, moreover, to which the coins of Corinth hardly ever attain; for, in point of fact, the drachms of Corinth and her colonies seldom exceed 42 grains in weight. There is only one specimen among the numerous examples in the national collection which weighs as much as 45 grains (*Cat. Corinth*, p. 3, No. 28).

At Phocis, on the other hand, even among the few specimens in the British Museum, more than half the number exceed the Corinthian limit of 45 grains, and as many as five of the better preserved coins weigh more than 47 grains, while one of them reaches 48.8 grains.

Unfortunately no staters or drachms of Phocis have as yet been discovered, but the high average of weight maintained by the hemidrachms is, I venture to think, quite sufficient to prove that the coinage of Phocis, like that of the rest of Central Greece (Thessaly, Boeotia, Locris, &c.), excluding the earlier issues of Eubaea, followed the Æginetic standard, of which the well preserved extant staters of Boeotia, &c., weigh over 190 grains.

I quite acknowledge that the bull's or cow's head on the archaic didrachm (133.7 grains, *Cat. Central Greece*, Pl. XXII. 5), which I have attributed conjecturally to Eretria, very closely resembles the bull's head on the contemporary hemidrachms of the neighbouring territory of Phocis; but, on the other hand, it bears a still closer resemblance to the bull's head on the reverse of the Euboic tetradrachm (*op. cit.*, Pl. XXII. 6), of which the obverse is a Gorgon's head, while its Euboic weight, 133.7 grains (you are mistaken in supposing that I or any one else ever stated that its weight was Æginetic), and the characteristic diagonal division of the incuse square

on the reverse, mark it out as belonging to the same class of coins as the other didrachms of Euboic weight represented on the same plate, Nos. 1—3, which have the Gorgonion on the obverse.

It seems to me quite certain, therefore, that all these coins belong, without exception, to a region in which the Euboic standard prevailed. We are thus limited in our choice mainly to Euboea and Attica.

The arguments which you advance from the weights of the smaller denominations of the Phocian money in support of your theory that the Corinthian and not the Æginetic standard was in use in Phocis, hardly counterbalance the fact that the weight of the larger and more important denomination (viz. the hemidrachm) does not fit in with the Corinthian system. The weights of some of the smaller Æginetic denominations are doubtless practically identical with those of other denominations in the Corinthian system. Thus the Æginetic obol of 16 grains, when it is of full weight, is indistinguishable from the Euboic trihemiobol of 16.8 grains, when the latter is slightly deficient in weight, and the Æginetic trihemiobol of 24 grains, when, as is frequently the case, it is not of full weight, might perfectly well pass as an Euboic diobol of 22.5 grains.

As a rule very little information which can be relied upon is to be gained by studying the weights of these small coins apart from those of the drachms of which they are fractions, for the smaller coins are usually under weight, and very little care seems to have been bestowed upon them in this respect by the mint authorities, who were apparently quite satisfied if the denominations from the hemidrachm upwards attained to something like their just proportions.

With regard to your next contention, I must confess

that if the arguments I have already urged in the Introduction to my *Catalogue of the Coins of Attica*, p. xvii., have failed to convince you that the Athenian tetradrachms, with the primitive effigy of the head of Athena represented on Pl. I. of the above-mentioned catalogue, belong to the very earliest period of archaic art, and that they are most distinctly anterior to the numerous series of coins with the Gorgoneion, Horse, Half-horse, Wheel, &c., &c., which Curtius and Imhoof have attributed to the towns of Eubœa, I fear that the few additional remarks which I now submit for your consideration may prove equally unconvincing.

There is, however, one little point which seems to have escaped your notice. You state that there is no evidence that Eretria ever made use of any other type in early times than the Cow and Cuttle-fish, and that consequently the staters with the cow's or bull's head and Gorgoneion (*Cat. Central Greece*, Pl. XXII. 5, 6) must be ascribed respectively to Phocis and Athens. Now on Pl. XXIII. of this same catalogue, Nos. 7 and 8, there are two obols, one with a cow's or bull's head, *rev.* cuttle-fish, and the other with a Gorgoneion, *rev.* half-horse. The first of these (No. 7), you will I think agree with me, can hardly belong to any other town than Eretria, on account of the cuttle-fish, an unmistakably Eretrian typo. Thus your contention that the cow's head is not also an Eretrian type falls to the ground. The other coin, *obv.* Gorgoneion, *rev.* half-horse, seems to me to be a combination of two Eubœan types, the Gorgoneion of Eretria (?) and the half-horse of Cyme (?); but, of course, if you decline to admit that the half-horse is a Cymean type, my deduction is baseless, though, if you attribute the obverse type to Athens, it will be still incum-

bent upon you to show that the reverse type (the half-horse) is more appropriate to Athens than to Cyme, and that the fabric and style of the coin admit of its attribution to Athens.

Moreover, as all the early staters and divisions of as many as fifteen distinct types, most of which I have enumerated on page xlix. of the Introduction to the *Catalogue of the Coins of Central Greece*, clearly hang together, you will, it seems to me, either have to adopt Beulé's theory in its entirety, viz., that they all belong to Attica, or you will have to admit that they are the contemporary issues of a number of neighbouring cities, in which case the old towns of Eubœa, and places within the circle of Eubœan influence, naturally suggest themselves to our minds as the most probable places of mintage.

You fully admit, as I do, that it was most unusual for an ancient city to make use of a number of entirely different coin-types at one and the same time, and that, for obvious commercial reasons, it was the almost universal practice in the earliest ages for each important city to restrict itself, as far as possible, to a single easily recognised coin-type.

Acknowledging this prevalent custom, you select the Gorgoneion as the one characteristic and earliest Athenian coin-type; and, on the same grounds, you propose to transfer the bull's-head to Phocis, omitting to account for the fact that the bull's-head also occurs as the reverse type of one of the Gorgoneion tetradrachms (*Cat. Cent. Gr.*, Pl. XXII. 6), and, as I have already mentioned, that it is also found as the obverse type of an Eretrian obol in combination with the cuttle-fish (*Cat. Cent. Gr.*, Pl. XXIII. 7), while with regard to all the remaining types clearly belonging to the same class you offer no opinion whatever.

You justly remark that there is no pretence for saying that the didrachms and tetradrachms of the Euboic standard, the origin of which we are now discussing, have been chiefly or commonly found in Eubœa; but no one, so far as I remember, has ever asserted that this was the case.

As a matter of fact, there have been from time to time small finds of these coins in Attica, in Boeotia, in Chalcidice, and, within the last ten years, two finds in Eubœa itself—one at the village of Pascha, on the eastern slope of Mount Dirphys, on the old road leading from Eretria to Cyme, and the other at Eretria itself (U. Koehler, "Münzfundo auf Eubœa," *Mitth. d. arch Inst.*, ix., 254).

In most, if not all, of these hoards the anepigraphic coins were found mingled with Athenian tetradrachms, and in the Eubœan finds there were also among them specimens of Eretrian coins of the cow and cuttle-fish type. All this, however, only tends to prove that the anepigraphic coins circulated freely in early times not only in Eubœa but in Attica and Chalcidice, in fact wherever, in European Greece, the Euboic system prevailed, and possibly less freely even in Boeotia and Phocis where the coinage was Æginetic. The actual places of mintage cannot certainly be determined by the localities in which they are nowadays found, and we are consequently thrown back upon the evidence afforded by type and fabric, and by a comparison of these with the known, and for the most part inscribed, money of Attica, Eubœa, Phocis, Boeotia, and Chalcidice; in other words, upon a balance of probabilities.

I acknowledge that if we had only a single series of coins to consider, viz., that with the Gorgoneion, your arguments in favour of the attribution to Athens would

be more difficult to combat, for I admit that the Gorgoneion is a type generally more characteristic of the worship of Athena than of moon-worship. The evidence for its connection with moon-worship is, however, not unsupported by good authorities, *cf.* a passage in Clemens Alexandrinus (*Stromat.* v. 8, sec. 50), *Γοργόνειον τὴν σελιήνην* *εἰὰ τὸ ἐν αὐτῇ πρόσωπον*, and another in Plutarch, *De facie in orbe lunæ*, xxix., 6, *cf.* also Gaedechens, in Ersch u. Gruber's *Allg. Encyklop.*, Sekt. i., Bd. 74, p. 400; and Preller, *Gr. Myth.* ii. 64.

This interpretation of the signification of the Gorgoneion is, however, I am bound to acknowledge, not now generally accepted, and I refrain, therefore, from citing it as a convincing proof in favour of the attribution of the Gorgoneion type to Eretria. We are thus, in this particular instance, driven back altogether upon the evidence of style and fabric, and upon a comparison of these coins with the earliest Athenian tetradrachms, and here, as I think with Imhoof-Blumer, Ernst Curtius, and Ulrich Kochler, we are on firmer ground. The principal reasons against the attribution of the Gorgoneion coins to Athens may be summed up in a very few words.

In the first place, the earliest Athenian inscribed tetradrachms with the primitive head of Athena seem, as Professor Gardner has remarked (*Types of Greek Coins*, p. 84), "to pass the custom even of archaic art, and to belong to the very infancy of local design." If we had no historical data to take into consideration, I should be tempted to assign them to a period not later than the middle of the seventh century B.C. As it is, I regard them as the coinage inaugurated by Solon. It seems to me quite impossible to assign these excessively early types of the head of Athena, as you propose to do, to the time of Hippias, B.C. 527.

In the second place, the fifteen types of the so-called "*Wappenmünze*" are of a fabric entirely different from that of the Athenian tetradrachms; and it is hardly conceivable that Athens, at any period in her early history, could have issued coins of all these various types either simultaneously with, or subsequently to, her earliest inscribed tetradrachms. It is needless to state that the series with the Gorgoncion is inseparable from the others.

In the third place, the series with the wheel is continued on the later coinage of Chaleis, in Eubœa, a fact which, when taken in connection with the other evidence, seems to indicate Eubœa as the district to which the majority of the other types also belong.

In the fourth place; the bull's-head is also a very characteristic Eubœan type which occurs on later coins of Eretria. The half-horse seems also to point to Cymc, and occurs at Cyme in Æolis, showing, possibly, an early connection between the two homonymous towns.

Taking all these facts into consideration I am, in spite of the arguments you have so ably marshalled, still strongly of opinion that neither the Gorgoneion coins, nor any of the other fourteen types included under the misleading term of "*Wappenmünze*" which have been enumerated by Dr. Imhoof-Blumer in his paper *Die Euboische Silberwährung*, can be attributed to Athens, and that there is strong *prima facie* evidence in favour of assigning them conjecturally, for the present, to Eubœa, though it is quite possible that there may have been some sort of tacit understanding between Athens and Eubœa which authorised the free circulation of the coins of Eubœa throughout Attica, and of the Athenian tetradrachms throughout Eubœa.

Yours very truly,

BARCLAY V. HEAD.

BRITISH MUSEUM,

July, 1893.

XIII.

LATER INDO-SCYTHIANS.

SCYTHO-SASSANIANS.

(See Plates XIII., XIV.)

THE coins which I am now about to describe have been known for the last fifty years by the name of "*Indo-Sassanian*." I prefer the name of "*Scytha-Sassanian*," as being more correctly descriptive of the Sassanian costume of the kings with their peculiar Sassanian symbols. The earliest notice of them is by James Prinsep, who examined the specimens obtained by Kerāmat Ali, the companion of Arthur Conolly.¹ He recognised that the inscriptions were in corrupt Greek characters, in which all the vowels were represented by O, which in Pahlavi is used for the inherent short a of Devanāgari. A few years later Wilson described them as large and convex pieces, with the inscription a mere circle of O's occasionally varied with P. He notes that, although found in the Kabul valley, these coins are "most plentifully met with in Badakshān," where Dr. Lord was informed that they were believed "to belong to a race of Rajput Princes once sovereigns of the province." The large coin with the ram's horns on the king's head-dress (Pl. IV., Fig. 15) is specially noted as having been found in Badakshān; and

¹ *Prinsep's Antiquities*, by Thomas, i. 129.



KANISHKAVASU-DEVA

PAONANOPAOKANHPRKIKORANO	A	PAONANOPAOKANHPRKIKORANO
PAONANOPAOKANHPRKIKORANO	B	PAONANOPAOKANHPRKIKORANO
PAONANOPAOKANHPRKIKORANO	C	PAONANOPAOKANHPRKIKORANO
PAONANOPAOKANHPRKIKORANO	D	PAONANOPAOKANHPRKIKORANO

HORMAZD II

Obverse.		Reverse.
E	Исдо Иорадо	Иорадо 00700
F	Исдо Иорадо	Иорадо 0010001...
G	Кокорокорадо	Кокорокорадо 0080000
H	Исдо Иорадо	Иорадо 0000000

VARARAN V.

J	аоркокорадо	Воркокорадо	0000000000
K	аорхокорадо	Ворхокорадо	0000000000
L	аорхадо	Ворхадо	0000000000
M	аоркокорадо	Воркокорадо	0000000000
N	Seal	W	0000000000

TORAMANA

A अर्गेज्जग्नभेदः

MIHIRAKULA

B	Silver Coin.	शरि मिहिरकुला
C	शरि मिहिरकुला	शरि मिहिरकुला

another coin equally large, with a plume surmounting the head-dress (A. A. xiv. 16) was obtained at Kunduz.²

Wilson further notes that several specimens were in the possession of Dr. Swiney, and that others had been sent to England by Dr. Lord and Sir Alex. Burnes. As I am aware that Dr. Swiney's collection was purchased from Kerāmat Ali, the fellow-traveller of Arthur Conolly, the specimens seen by Wilson were doubtless the same as those previously described by Prinsep. We thus learn that this collection came from the same country as the later acquisitions of Lord and Burnes, that is from Bada-kshān and Kunduz, or the districts on the Oxus, to the north of the Hindu Kush.

Having discovered the country to which these coins belong, the next step is to ascertain their date. On examination we see that the earliest specimens are very close imitations of the later, or posthumous, coins of the Kushān king, Vāsu Deva. The early money of this prince consists of pieces of gold, from 120 to 124 grains in weight, rather less than one inch in diameter, and of about the same thickness as an English sovereign. His later money gradually becomes thinner and broader, with a slightly convex obverse, while the Greek legend becomes more corrupt. The true name of the king was first read by myself as **BAZO ΔHO**, the Greek form of *Vāsu Dera*, or *Bās Deo*, whose inscriptions I saw dug up at Mathura in 1861. Of the early coins, three of which were found in a stūpa at Ali Masjid, the legend is (Pl. V., A and B),

PAONANO PAO BAZO ΔHO KOΠANO,
Shaonano Shao Bazo Deo Koshano.

² *Ariana Antiqua*, pp. 378—379.

This soon became corrupted to (Pl. V., C),

ÞOOHOOHO ÞOO BOZO OHO KÓÞOHO,
Shoonono Shoo Bozo Deo Koshono.

Wilson read the name as *Baraoro*, but he had detected that the character following BO was something like the figure of the Sanskrit numeral for 2.³ It was, in fact, the badly formed Z of BOZO.

On all the later coins which retain the name of **BAZO ΔHO**, or simply **BAZ ΔHO**, however much corrupted, the king's head-dress remains unchanged as a conical helmet or tiara, apparently covered with rows of jewels. But on all the thin, broad convex pieces, which I call Scytho-Sassanian, the head-dress assumes a decidedly Sassanian character. The same titles of *Shaonano Shao Koshano* are retained, but the name of *Bazo Deo* is gone, and a different name follows *Koshano*. On the reverse also there appears a second legend beside the old type of Siva with his bull Nandi. See the legends in Plate V. under the name of Hormazd II., Figs. E, F, G, H. At first the usual adjuncts of the original old type were retained, namely the *Triratna* Buddhist symbol on the right, and the *Swastika* between the king's feet.

Gradually the coins become larger and more convex, and the Greek legend more corrupt, while the obverse type of the king standing by an altar, and the reverse type of Siva and his bull Nandi, remain the same but of ruder execution. Various changes appear in the king's head-dress, such as a lion's head with open mouth on the front of the helmet, a round tiara surmounted by a tall plume, a helmet with a pair of ram's horns. On all these coins of Sassanian appearance the dress of the king

³ *Ariana Antiqua*, p. 378.

approaches very closely to the well-known royal costume of the Sassanians. The trousers are now much fuller, the hair is much more bushy, while the ends of the diadem have become very broad, floating streamers, as seen on all the Sassanian coins.

These changes in the head-dress are of special importance in connecting these later coins with the Sassanian princes. Thus the *helmet* surmounted by a lion's head with open mouth is found upon several coins of the Sassanian king, Hormazd II., who reigned from A.D. 301 to 310. On a few of these he is styled king of the Kushâns (*Kushán malkán malká*).⁴ The tall *Plume* type is copied from the portrait of *Pápek Malká*, the progenitor of the Sassanians.⁵ The *Ram's horns* are connected with Sapor II., who is described by Ammianus, on his advance against Amida, as "wearing, instead of a crown, a golden figure of a *Ram's head* inlaid with jewels."⁶

The only other coins of this class that I have met with are so extremely corrupt and barbarous that they show most decisively the decline of the Sassanian power in the country where they are found.

The extremo period which can be assigned to these coins may be about a century and a half, or from A.D. 300 to 450. The former date marks the accession of Hormazd II., who married the daughter of the Kushân king of Kâbul. The latter date marks the period when the White Huns, after a nine years' war with Isdegerd II.,

⁴ See Plate IV., Fig. 2, a gold coin of Hormazd II. Brit. Mus. and Author.

⁵ See Plate IV., Fig. 1, a silver coin of Ardesir I., with Pápek's head on the reverse. This coin is from General Court's collection.

⁶ See Plate IV., Fig. 15, gold coin. Author.

became the dominant power on the Oxus. The earlier Sassanian princes were too much engaged with Rome and Armenia to find time for Eastern expeditions. But Varahrān II. obtained the title of *Segān Shāh*, or Σεγεστανῶν Βασιλεὺς, by his conquest of Sakastene or *Segistān*, the country of the Sakas. The coins with the ram's horns on the head-dress bear the name of *Varahrān*, and might perhaps be assigned to this prince, as we know that he was on his Eastern frontier in A.D. 285, when the Emperor Carus invaded Persia. But as this Eastern expedition most probably refers to Sakastene or Sistan, and not to the countries on the Oxus where the coins are found, I would rather assign the coins to Varahrān V. or Bahrām Gor, who defeated the White Huns near Merv, and appointed his brother Narses governor of Khorasān, with his capital at Balkh.

The coins of Hormazd II. were first assigned to this prince by E. Thomas, on the authority of a small copper piece with the figures of Siva and his bull, which gives the name of *Auhrmazd* in Pahlavi, with the title of *Laba-Kushān Malkān Malkā*. A gold coin of the same king with a lion's head as a crest, but with the usual fire-altar and attendants on the reverse, bears the same inscription. Dr. Mordtmann disputes Thomas's reading, and proposes *bagi rushān* for *labā-kushān*.⁷ I possess a duplicate of the gold coin, and I unhesitatingly adopt Thomas's reading, but not his translation of "Lion-killer." My objection to his translation is chiefly based on the fact that, as Hormazd had married the daughter of the Kushān king,⁸

⁷ *Num. Chron.*, xv., p. 182, and Pl. Fig. 8; Prinsep's *Indian Antiquities*, ii. 165; *Num. Chron.*, second series, xii. 88.

⁸ *Khondemir*, Rehatsek's translation, ii. 340.

the title of *Kushān malkān malkā* must refer to the Kushān alliance. But I object also to the hybrid *Labā-Kushān* as not Persian. The well-known Persian term for a "lion-killer" is *Sher-afkan*. Strangely enough this title was given to the first husband of the celebrated *Nur Jahān*, and was afterwards given to *Nur Jahān* herself by one of the courtiers of her second husband, the Emperor Jahan-gir, after she had killed four tigers with a musket. *Zani-sher-afkan*, he called her, which might either mean "Wife of Sher-afkan," or the "lady lion-killer."⁹

E. Thomas supposes that the lord of Kābul may have been conquered by the Sassanian king, or have ceded a province to him. I would rather suggest that the King of Kābul may have made peace with the Sassanian king by giving him a daughter and ceding the province of Balkh, to the north of the Hindu Kush. That the name of Kushān on the coins refers to the people appears to me to be absolutely certain, as it only repeats in Pahlavi what is recorded in corrupt Greek on the large thin gold coins with the figure of Siva on the reverse. On these coins the legend is simply (Pl. V., Hormazd II.)

POONONO POO KOPONO, Shaonano Shao Koshano

on the left side, and on the right side some very corrupt Greek letters which may be read as **OYPOMAZΔO
ΒΑΓΩ**.

The connection thus formed between the Persians and the Kushāns would seem to have been interrupted after some time, as Ammianus relates that when war broke out with Remo Saper II. was lying in winter quarters on the borders of the *Chionitæ* and *Euseni*, with whom he at enco

⁹ Blochmann's *Ain Akbari*, p. 525, note 394.

mado a treaty and returned to his own country.¹⁰ Afterwards, in A.D. 358, at the siege of Amida, Sapor was accompanied by the kings of the Chionitæ and the Albani, of equal rank and splendour. *Grumbates*, the king of the Chionitæ, was "of middle ago and wrinkled limbs, but of a grand spirit, and already distinguished for many victories." In the disposition of the troops of his allies no mention is made of the Euseni; but the four sides of the city aro beleaguered by the *Chionitæ*, the *Albani*, tho *Vertæ*, and the *Segestani*.¹¹ It seems certain that all were tribes from the north-eastern quarter of the empire.. The *Segestani* we know aro the *Sukas* of Sistan. Tho Chionitæ I take to be the *Kushâns* or *Tokhari*, as their name would seem to be only a literal Greek translation of the "snow-men" or *Tukhâras*, being regularly formed from $\chi\iota\omega\nu$, "snow." They were therefore the people of Kabul and Balkh. The *Albani* might therefore be the people of the Paropamisus, the *Aoghâns* or *Eastern Albani*, or, perhaps, the inhabitants of *Labus* or *Elburz*, that is of *Khorasân*. The Caspian Gates were also called *Albaniae Portæ*, because they led to the Eastern Albani. Polybius uses the term *Λάβος* or *Δαβούτας* for Elburz. *Laba-Kushân* may, therefore, mean simply the *Kushâns* of Elburz or *Khorasân*.¹²

It must be remembered that Prince Hormazd (tho uncle of Hormazd II.), during the reign of his brother Narses, had sought refuge with the Scythians: "Ipsos Persas ipsumquo regem adscitis *Saccis*, et *Russis*, et *Gellis*, petit frater *Ormies*," aro the words of the Panegyric quoted by Gibbon. Tho first people are certainly tho

¹⁰ *Ammianus Marcellinus*, xvi. 9—4 and xvii. 5—1.

¹¹ *Ibid.* xviii. 6—1 and xix. 2—8.

¹² *Polybius*, x. 4.

Sacæ or *Sakas*; the second may be the *Euseni* of Ammianus, and the last may be his *Gelani*. Before his accession, therefore, Hormazd II. had already been on friendly terms with the Scythian tribes on his north-east frontier. The presence of his successor, Sapor II., upon the same frontier was no doubt necessary for the maintenance of his authority in that quarter. The only coins of Sapor that I can assign to his eastern dominion are the copper pieces (Plate IV., Fig. 9) with the corrupt Greek legend **PO8OPO**, *Shoboro*, of which I possess several specimens.

These provinces on the north-east frontier of Persia, which I believe to have been acquired by Hormazd II., and successfully held by Sapor II., must have been still in the possession of the Sassanian kings, when about A.D. 435 the king of the Ephthalites or White Huns suddenly crossed the Oxus and overran the province of Merv, or Margiana. The Sassanian king, Varahrân V., or Bahram Gor, at once took the field, and having twice defeated the Huns, he set up a pillar to mark his boundary, and appointed his brother Narses Governor of Khorasân, with Balkh as his headquarters.¹³ It is to Bahram Gor, or Varahrân V., that I would assign the thin gold coins with the ram's horns, as they bear the peculiar symbol which is found on the known coins and seals of that prince.

In the reign of Bahram's successor, Isdegerd II., the White Huns again made a raid on the Sassanian territories. The Persian king, in A.D. 443, took up his residence at Nishapur and directed the war for nine years, until in A.D. 451 he crossed the Oxus and signally defeated them. Three or four years later, or about A.D. 455, the White Huns again invaded Khorasân. Isdegerd once

¹³ Geo. Rawlinson, *Seventh Oriental Monarchy*, p. 298.

more drove them back, but, on following them across the Oxus, he fell into an ambush and was forced to retreat to his own territory. The Ephthalite king who was then reigning was *Chu-Khan*, the *Konkha* of Priscus. A few years later, from A.D. 464 to 485, during the reign of the Khâkân *Shulo-Puchin*, the *Khush Navâs* of the Muhammadan historians, the White Huns renewed their raids, and the provinces to the south of the Oxus were permanently lost to the Persian kingdom.

Perhaps it may be objected to my attribution of these coins to the Sassanian kings that they may have been issued by the later Kushân kings of Kâbul in Sassanian costumes. But the fact that not a single specimen of these thin broad pieces has been found in any of the Stûpas of the Kâbul valley, offers a strong objection to their issue by any of the Kushân kings. The head-dresses also are exact copies of those worn by some of the actual Sassanian kings with their names given in Pahlavi characters. In the case of Varahrân I find the peculiar symbol which is used on most of his coins repeated on two different seals, one of which bears the name of the Sassanian king in Pahlavi characters.

We have also the strong evidence of the gold coins which are actually found in the Kâbul valley. They continue the costume of Vâsu Deva, with the addition of single Indian letters in the field.

The inscriptions in corrupt Greek as I read them are fully supported by the costumes of the kings; thus—

OYPOMAZΔO has the Lion's head as a crest, as on the Pahlavi coins of Hormazd II.

þO8OPO has the turreted crown as on most of the coins of *Shahpur* II.

OOPOOPANO has the ram's horns as on the Pahlavi coins of *Varahrân* V.

NOTES ON THE COINS.

In the corrupt Greek legends of these coins it will be seen that both the letters **A** and **Δ** have become **O**, and that **N** and **H** have assumed new forms as **Η** and **Η**, which are often used wrongly one for the other. The peculiar letter **ρ** = **SH**, the **B** and the **P** have alone remained unchanged. A comparison of the large gold coins will show that one-half of the legend comprising the royal title of "king of kings of the Kushāns" has been continued, more or less imperfectly, on all of them. But as the other half of the legend shows no trace of the name of *Bazo Deo*, it is clear that the rude characters must represent some other names.

Thus the coins with the Lion's head, which I attribute to *Hormazd II.*, bear a legend in corrupt Greek characters as shown in Pl. V., Figs. E, F, G, H. The last gives the titles as *nano Shao Koshono Shao* on the left, and *Hoor-mozdo Oogor* on the right. Fig. G gives the name as *Ouramozdo Bogor*. The term *Bogor* I take to be intended for *Bagpur* or *Bagaputra*, the *Devaputra* of India.¹⁴

The coins of *Shahpur* are unfortunately limited to copper, but the name in corrupt Greek is clearly **ροθορο**, *Shoboro*. The king's name is written **Σαβώρ** by *Syneillus*, and *Schabour* by *D'Herbelot*, the **P** in Persian words being frequently changed to **B**, as in *Badshah* for *Padshah*.

The gold coins of *Varahrán V.*, with Greek legends, offer two different head-dresses, both of which are found

¹⁴ I note as a curious fact that the great Kushān kings *Kanishka*, *Huvishka*, and *Vāsu Deva*, in spite of their adoption of Zoroastrian deities, make use of the title of *Devaputra*, although *Deva* meant only *Demon* in Persia. Similarly *Gondophares* and his family are all *Devaputra*.

on the small copper pieces with Pahlavi legends. The attribution therefore seems certain, more particularly as it is supported by the evidence of a seal (Pl. V., Fig. N) with the head of *Varahrân* and his name in Pahlavi, accompanied by the peculiar symbol which is found on these gold coins. I have given four examples of the corrupt Greek legends (Pl. V., Figs. J, K, L, M), which I read as *Bogo Oorohrano*, for *Baga Varahrân*. The title on the coin with the ram's horns reads *Roononoka Kosho*(no). For the ram's horn head-dress I may quote the description given by Ammianus of Sapor II., as a "Ram's head inlaid with jewels," when the historian saw him as he advanced against Amida.

The legends on the reverse of these gold coins are written in the same corrupt Greek characters; but instead of the one short word *oksho* as on the *Vâsu Deva* coins, there are two distinct legends, of which the shorter one may be intended for *oksho*. The longer one seems to be *Borzo*, or something similar, on all the coins both of Hormazd and of *Varahrân*. It is possible that it might be intended for *Borzo Deo* for *Vâsu Deva*, which might have been considered as a general term for a king. The same legend is found on the seal (Pl. V. N.), with the symbol of *Varahrân*. On the coins of the later *Vâsu Deva* of Multân the name is similarly represented in Pahlavi by *Varsu Tef*. Hitherto we have not found any successor of the Kushân king Bazo Deo, and I think it quite possible that *Vâsu Deva* was considered to be the general term for the king of the Kushâns. In this view the name placed on the coins might be taken to denote a "vassal king," like Grumbates, king of the Chionitæ, who accompanied Sapor II. to the siege of Amida.

At this very time, A.D. 358, the Kushâns were still in

the height of their power, as the Samudra Gupta inscription on the Allahabad pillar mentions the presents sent by the *Devaputra Shâhi Shahânsâhi* to the Indian king. As these were the peculiar titles assumed by the great Kushâns, the presents must have been sent by one of them. As Grumbates was still an active man at the siege of Amida in A.D. 358, and as Samudra Gupta's reign must have extended from about 345 to 380 A.D., he may himself have sent the presents to the great Gupta king. I am inclined to assign the coins Plate II., Fig. 6, of the Later Great Kushâns, with GR under the king's arm, to Grumbates.

The power of the Kushâns in the beginning of the fourth century A.D., is shown by the costly presents and the splendour of the escort which accompanied the Kushâns princess to become the queen of Hormisdas II. (A.D. 301 to 309). It is possible that the lady may have been an aunt; or perhaps even a younger sister, of Grumbates.

DESCRIPTION OF THE PLATE.

No.	Metal.	Inches.	Grains.	Plate.
1	R	0.80	55	<p>[Author, unique.]</p> <p>Side-face of King Pāpāk to left, with peculiar plume surmounting helmet. Pahlavi legend, <i>Lari baqī Pāpāki Malkāi</i>. I have given this coin for the sake of the tall plume on the helmet, which is imitated on the coins of Hormazd II. and Varahrān V.</p> <p>The obverse bears the head of his son, <i>Artashat̄r malkān malkā</i>, exactly as published by E. Thomas.</p> <p>[Brit. Mus., Dupl. Author.]</p>
2	N	0.75	111	<p>Bust of King to right, with Lion's head and tall plume in head-dress. Pahlavi legend, <i>Mazdān baqī Aharmazdi Labā Kushān Malkān Malkā</i>.</p> <p>"The Mazdean divine Hormazd, of the <i>Labā-Kushāns</i> king of kings."</p> <p>Fire altar with standing attendants. Pahlavi legend, the same as on the obverse, with the addition of <i>Malki</i> over the fire-altar.</p> <p>[See E. Thomas in <i>Num. Chron.</i> xv. 182.]</p> <p>[Brit. Mus., Author.]</p>
3	N	0.80	111	Full-length figure of King, with Lion's head and plume as in

No. 2, holding trident in left hand, and pointing downwards to a small altar with right hand. Trident over altar. The combined *Tri-ratna* and *Dharma-Chakra* symbol to right, and *Sesastikta* between feet. Legend in corrupt Greek:

NONO PAO KOPONO OYPOMAZOO BAΓΟΟ,

which appears to be intended for—

PAO NONO PAO KOPANO OYPAMAZAO BAΓΟ,

"The king of kings of the Kusfans, Hormazd the divine," Siva standing before the bull Nandi.

[Author, duplicate.]

King standing as on No. 3, with Lion's head and tall plume, the broad ends of diadem floating upwards behind head. Tridents and symbols as on No. 3, with three dots under left arm. Pahlavi legend as No. 3. Some of the characters vary slightly on different specimens, but they are clearly intended to represent the same legend. The Indian god Siva standing before the bull Nandi, with trident in left hand and noose in right hand. Pahlavi legend, varying, OOA2 OOOHΛOO to right, and 2OSO to left. The last four letters are probably intended for OKPO written inversely.

[Author.]
IV. 4
King standing as on last, with Lion's head and nimbus, but

1.10 66.5 N'

[Author.]

IV. 4

DESCRIPTION OF THE PLATE—*continued.*

No.	Metal.	Index.	Grains.	Plate.
5	Æ	0.60	38.5	without plume (see <i>Ariana Antiqua</i> , xiv. 17). Pahlavi legend varying slightly from No. 4. The Indian god Siva with Bull, as on No. 4. Pahlavi legend, OOP2 OOOO OOOO .
6	Æ	0.60	38.5	No. 5 was a small gold coin of the same types as No. 4. (Author—now lost.)
				[Brit. Mus.]
6	Æ	0.60	38.5	Bust of King as on No. 2. Pahlavi legend, <i>Auhramazdi Labá-Kushán Maka</i> , "Hormazd of the Labá-Kusháns King." (See E. Thomas in <i>Nun. Chron.</i> xv. 184.)
				[Author, unique.]
7	Æ	0.60	32	Bust of King, with Lion's head and plume. Pahlavi legend, <i>Auhramazdi (Malki)</i> .
8	Æ	0.70	72.5	Fire-altar, with bust and arms of human figure on top. Bust of King, with Lion's head and plume. Pahlavi legend, <i>Auhramazdi (Malki)</i> .
				Fire-altar without attendants.
9	Æ	0.75	72	[<i>Ant. Ant.</i> xvii. 18, 14.]
				Bust of King, with turroed crown surmounted by jewelled dome, bushy hair and beard, and broad fillets of diadem
				IV. 9

10	—	—	—	—	121.5	Full-length figure of King, with broad tiara surmounted by phnne, two tridents, Tri-ratna symbol, and swastika. Three dots under left arm. Corrupt Greek legend:	POONONO PAO KOPONO BORO OOPHOOPOO,	which I read as, <i>Shtanono Shao Kushano Bayo Orokorono,</i> “The king of kings of the Kushans, divine Varahran.”	IV. 12
11	—	—	—	—	1.25	[Author.]		[Author.]	
12	<i>N</i>	—	—	—	1.30	Full-length figure of King, as on No. 12, but symbol on right		IV. 13	
13	<i>N</i>	—	—	—	106	[Author.]		[Author.]	

DESCRIPTION OF THE PLATE—*continued.*

No.	Metal.	Thickness.	Grains.	Plate.
14	AE	0·60	29	similar to that of Varahrān V., as used on his other coins and seals. Swastika omitted between feet. Corrupt Greek legend only slightly different from No. 12. The Indian god Siva, with Bull, corrupt Greek legend double struck. [Author, not shown.]
15	AV	1·30	121	Bust of King, with same headdress as on the gold coins Nos. 12 and 13. Pahlavi legend, Varahrān Malkā. Fire-altar, with bust of man above. Legend lost. [Author, unique.]
16	AE	0·55	28	Full-length figure of King, as on Nos. 12 and 13, but with headdress surmounted by ram's horns and plume. To right, the Varahrān symbol and swastika. Corrupt Greek legend only a slight variant from No. 12. Siva and Bull, with corrupt Greek legend as on No. 12. [2 specimens, Author.]
				IV. 15, 17 IV. 16, 17
				IV. 16, 17

PLATE V.

A B C D (*left hand*) inscriptions on gold coins of *Kanishka*, with the symbol of *Vāsu Deva*, instead of his usual one. Probably posthumous coins, with corrupt Greek legends.

A B C D (*right hand*) inscriptions on coins of *Vāsu Deva*, with corrupt Greek legends, probably of late date and posthumous.

E F G H, inscriptions on large thin gold coins of Hormazd II. The King's dress is Sassanian and his helmet is surmounted by a lion's head, as on the gold coin, with his name in Pahlavi (Pl. IV., No. 2). It will be seen that the name is omitted between *Shaonano Shao* and *Koshano*, and a new name is given following *Koshano*. This I venture to read as *Ouromazdo* on one coin and *Hormazdo* on a second coin, followed by *Bazoo*, which may be intended for *Bago*, the "divine." The short legend on the reverse seems to read *Borzo*, for *Bago* or *Vāsu*, as we learn from the later coins of *Vāsu Deva*, king of Multān, whose name is written *Varsu Tef* in Pahlavi.

J K L M, inscriptions on large thin gold coins of *Varahrān V.* These legends are very corrupt. On J, I read ++ *nono sho koshono* followed by *Borooron bako*. The others give only slight variations for this reading.

N, is an amethyst seal belonging to General Pearse. It bears the same symbol which is found on the coin L, and on the known coin of *Varahrān V.* with the ram's horn (Pl. IV., Fig. 15).

The names of *Toramāna* and *Mihirakula*, at the foot of the Plate, will be referred to in my paper on "The White Huns," which forms Part IV. of the present series of "Coins of the Later Indo-Scythians."

A. CUNNINGHAM.

XIV.

LATER INDO-SCYTHIANS.

LITTLE KUSHĀNS.

(See Plate XV.)

THE coins of the Little Kushāns are of considerable interest, as they begin with **KIDARA** or **KI-TO-LO**, the *Shāhi* of the *Ta-Yueti*, or Great Kushāns, who founded the kingdom of the Little Yucti in Gandhāra about A.D. 425 to 430. In a previous brief account of this kingdom I have given my reasons for identifying *Kidāra* of the coins with the *Kitolo* of the Chinese writers, who conquered Gandhāra, and placed his son in the government of Peshāwar, while he returned to the westward to repel an inroad of the White Huns. I possess several gold coins and three silver coins of *Kidāra*. The former present the well-known types of the Kushān kings, with the standing raja and the sitting goddess; but the latter are of Sassanian typo, giving the king's portrait in full face with his name, title, and tribe in Indian letters. The legend is *Kidāra Kushāna shāhi*, or "Kidāra king of the Kushāns." The reverse has the Sassanian fire-altar, with three letters or numerals on the base, and the usual attendant priests at the side. I read the three characters as numerals forming 239, or perhaps 339, which, referred to the era of A.D. 78, would give either A.D. 317 or 417. The latter is the preferable date, as the period of *Kidāra* can

be fixed with some certainty in the first half of the fifth century A.D. We learn from the Chinese notices that his expedition to the South of the Caucasus was caused by the pressure of the White Huns, before whom he at first retired to the westward, and afterwards crossed the mountains into Kipin or Kophene. The victorious Ephthalites continued their advance to the westward until they reached Merv. There they were encountered by Varahrān V., who defeated them with great slaughter in A.D. 428. Their king Tātān was killed and his queen captured. Narses, the brother of the Persian king, was appointed Governor of Khorasān, with his residence at Balkh. The retirement of Kitolo before the advance of the White Huns must therefore be placed earlier than A.D. 428—or, say, about A.D. 425, or perhaps even earlier.

The Ephthalites remained quiet during the reign of *Solien Khan*, A.D. 431-443; but on the accession of *Chu-Khan*, the *Konkha* or *Kounkhas* of Priscus, war again broke out, and lasted from A.D. 443 to 456. In the middle of this period the historian Priscus was in the camp of the great Hun conqueror Attila, where he first heard of the *Oūvvoi-Kīcapīta*. These two names I would now separate by identifying the *Huns* with the Ephthalites, and the *Kidaritæ* with the Little Kushāns, whose kingdom was established by *Kidāra*. The family name of *Kidāra* is found repeated on all the gold and copper coins of the Panjab which can be assigned to this period, including the later money of *Toramāna* and his son *Pravarasena* of Kashmir. The name is also recorded by the early Muhammadan writers as *Kitormān* and *Kitorān*; and it still exists in Kāfiristan, as the chiefs of Chitrāl now proudly style themselves *Shah Kitor*. In A.D. 1030 Alberuni mentions the *Kitormān* kings. Two centuries later Changiz Khan,

after his campaign in the Hindu Kush, wintered in *Buya Kitor*, and nearly two hundred years still later the country of the *Kitor Kâsirs* was invaded by Timur.¹

Kitolo himself is said to have conquered five different countries or provinces to the north of *Gandhâra* (or *Kandahâr*).² No names are given; but I conclude that his kingdom included *Ghazni* and *Kâbul* on the west, with *Nagarahâra* and *Chitrâl* in the middle, and *Gandhâra* with *Udyâna* on the east. *Kitolo* established his son in *Gandhâra*, with *Purushâwar* as his capital, and then returned to the west to oppose the Ephthalites. The Chinese record that these Little Kushâns had coins of gold and silver, a fact which is attested by my coins of *Kidâra* himself as well as of *Pravarasena* in both metals. One gold coin of *Kidâra* was extracted by myself from the *Stûpa* of *Baoti Pind*, a few miles to the north-west of *Shah-dheri* or *Taxila*. Other coins in gold, with the tribal title of *Kidâra* written perpendicularly under the king's arm, present the names of *Sri Sila*, *Sri Kritavirya*, *Sri Visvâ*, *Sri Kusala*, and *Sri Prakâsa* in the margin. All of these were no doubt the successors of *Kidâra* in the north-west *Panjâb* (see Figs. 10 to 15, Plate VI.).

Towards the end of the fifth century the Little Kushâns, or *Kidaritæ*, as I think they may be called, were expelled from *Gandhâra* by an irruption of the Ephthalites or White Huns. The leader of this invasion is called *Laelih* by *Sung-yun*, and his date is placed at two generations prior to the accession of the king who was reigning in A.D. 520, or say from forty to fifty years before A.D. 515; or in A.D. 465 to 475. The rule of the *Kidaritæ* had, there-

¹ *Sir H. Yule*, ii. 584, note.

² *Les Huns Blancs*, in passage translated by *Julien*, p. 48; also *Rémusat*, *Nouv. Mélanges*, i. 223.

fore, lasted for only forty or fifty years, or from A.D. 425. A Kidarite gold coin was found by Masson in No. 10 Stūpa at Hiddā, in company with gold coins of Theodosius II., Marcian, and Leo.³ As the last of these Emperors died in A.D. 474, the Little Kushāns must have been ruling until about that time—what, then, became of the *Kidaritæ* after the Ephthalite conquest? They were certainly expelled from Gandhāra, but they still continued to hold dominion in other districts, as their coins of later dates are very numerous. I conclude therefore that they retired to the north into Chitrāl and Gilgit to the west of the Indus, and to Pakhali and Kashmir to the east of the river.

But the rule of the White Huns on the Upper Indus was brought to a close about A.D. 540 or 545 by the defeat and death of Mihir Kul, the son of *Toramāna*. The White Huns had pushed their conquests into Sindh and Malwa, and even into Gwalior and the valley of the Ganges. But their victorious career in India was checked by the crushing defeat of Mihir Kul at *Kahror*, near Multān.⁴ The Hindu Princes, *Nara Sinha Gupta*, of Magadha, and *Yasodharman*, of Mālwa, combined with others against the common enemy, and after his defeat the *Kidaritæ* of the Upper Indus must have recovered much of their former dominions. There they continued to reign and to strike coins in gold and copper, all stamped with their tribal name of *Kidāra*. Their rule lasted for three centuries until Kanak, "the last of the Kitormān kings," was sup-

³ *Ariana Antiqua*, Pl. XVIII., 26.

⁴ Beal's *Huen Thsang*, i. 169; Sachau's *Alberuni*, ii. 6; Vassilief's *Tārāndh*, by M. La Commé, p. 51, note. *Kahror*, the place where Mihir Kul was defeated, is a large town between Bahāwalpur and Multān.

planted by his Brahman minister about A.D. 850. But even after their tribal name fell into disuse the types of their coinage still lingered on the money of Kashmir for four centuries longer down to the Muhammadan conquest.

Shortly after the death of Mihir Kul, the Jâbuli king of the conquering Huns, the *Kidâras* must have regained possession of *Taxila* or *Shah-dheri*, as I believe that this famous city received the latter name from its being the residence of the *Shâhi* kings. As to the successors of *Kidâra* they inherited this well-known title of the great *Kushân* sovereigns. Throughout the native history of Kashmir these kings are generally styled *Shâhi*, or simply "the *Shâhi*," and their dominion the *Shâhi-râjya*. Towards the middle of the seventh century the *Karkota* kings of Kashmir got possession of *Taxila* and the country of the Salt Range.⁵ The *Shâhis* then retired to the west of the Indus, with *Ohind* as their capital. But even at so late a date as A.D. 900, the reigning king, *Lalliya Shâhi*, is said to be "amongst kings like the sun amongst the stars."⁶

Al Beruni, who wrote in A.D. 1030, also speaks of the *Shâhiya* kingdom as having existed for about sixty generations or reigns; but he adds that "this *Hindu Shâhiya* dynasty is now extinct." It became extinct by the death of *Bhîma Pâla*, the son of *Trilochana Pâla*, in A.D. 1026. He was the last of the family which had so

⁵ Beal's *Huen Thsang*.

⁶ *Raja Tarangini*, v. 154. Troyer calls him "the illustrious *Sâhi*, of the country of *Lalli*." But the original has *Srimâl-Lalliya Sâhi*, which clearly refers to a man and not to a country. *Sri-mân* is a common honorific title of kings. The learned translator also has made a mistake in identifying the *country* of *Sâhi* with the petty hamlet of *Sâhi-hati*, on the road from Simla to the Satlej. *Hati* means a *Baniya's* shop. I know the place well.

resolutely opposed the Ghazni kings for upwards of half a century. From this family the rajas of Kashmir took wives on the same terms as they received them from the rajas of Kangra. Shâhi queens are frequently mentioned, and particular mention is made of the Shâhi Vasantalekha, the favourite queen of Harsha, who became a Sati after his death in A.D. 1101.

According to Ferishta the Indian kings who opposed Sabuktagin and his son Mahmud were Brâhmans⁷; and apparently Al Beruni says the same. His words are: "After him (i.e., after Kalar, the Brâhman) ruled the Brâhman kings Sâmand, Kamalu, Bhîm, Jaypâl, Anandpâl, Tarojan-pâl." It is a curious fact that not a single coin has yet been found of any of the Pâl kings, although the money of Jaypâl's predecessors is very common. Both Thomas and Elliot have referred to this change of name as probably indicating a change of family. That there must have been a change of family seems to me to be absolutely certain, for the simple reason that no Brahman can be named Pâl. The change in the ruling family is further proved by Ferishta's statement that Jaypâl was the son of Ishtpâl, or Aşatpâl, and not of his predecessor Bhîma, or Bhîma Deva, as he is named on his coins. That Trilochan Pâl was not a Brâhman is shown by his proposal to wed his son Bhîm Pâl to the daughter of the great Rajput Raja Chandra Rai.

Masudi, who wrote not later than A.D. 950, and therefore before the accession of Jaypâl, states that the King of Kandahâr [Gandhâra] is called *Hahaj*, and that "this name is common to all the kings of that country."⁸ He

⁷ Briggs, i. 15, and Sachau's *Al Beruni*, ii. 13.

⁸ Elliot's *Historians*, i. 22.

adds that "Kandabâr is the country of the Rajput," the family name cannot refer to the Brâhman predecessors of Jaipâl, but rather to *Aṣat-pâl*, his father and his ancestors. I prefer to read the family name as *Jajaha*, and to identify it with that of the *Janjuha* Rajputs, who have formed a large part of the population of the Salt Rango for many centuries. Baber writes the name as *Janjuha*, which is still in use; but the commoner form at the present day is *Januha*. Abul Fazl also uses this form, and states that the warlike Mewâtis, who are all Muhammadans, were converted *Januhas*.⁹ The Maâsir writes the name as جانوہ *Jânuha*. I would therefore identify these *Januhas* with the *Jajaha* of Masudi.

I have already mentioned the gold coins bearing the names of *Sri Sila* [- -], *Sri Kritavirya*, *Sri Viswa*, *Sri Kusala*, and *Sri Prakâṣa*, all of whom I take to have been the successors of *Kitolo*, as they give his name under the king's arm in the Indian form of *Kidâra*. As none of these names is found in the Kashmir list, I conclude that the kings themselves must have reigned in the country to the west of Kashmir—in Shah-dheri and Mansera to the east of the Indus, and in Yasin and Chitrâl to the west of that river. In fact, a coin of *Sri Sila* [- -] was found in No. 10 Tope at Hidda, in company with coins of Theodosius, Marcian, and Leo, who reigned from A.D. 450 to 474.¹⁰

But there are other coins with the name of *Kidâra* which undoubtedly belong to Kashmir. The earliest are the well-known copper pieces of *Toramâna*, and the gold and silver coins of his son *Pravarasena*. The former coins

⁹ Blochmann's *Ain Akbari*, i. 456 and 877.

¹⁰ *Ariana Antiqua*, Pl. XVIII., 26.

are actually mentioned in the *Raja Tarangini* [iii. 103] under the name of *Bâlahat*. The story is that *Toramâna*, the younger brother of *Raja Hiranya*, “ayant supprimé la multitude des petites monnaies qui avaient cours, répandit des dinaires frappés en son propre nom.”¹¹ The king resented this disrespect, and cast his brother into prison, where he died. It is this prisoner, *who never reigned* at all, that *Bhau Dâji* and *Râjendra Lâl* have strangely attempted to identify with *Toramâna Jaüla*, the father of *Mihir Kul* and the conqueror of *Sindh* and *Mâlwa*.

The native translator of the *Raja Tarangini*¹² differs slightly from *Troyer* in his rendering of the passage about the coins struck by *Toramâna*. He says that the young prince “forbade the use of the coins struck by King *Vâla*, and largely circulated the *Dinnaras* coined by himself.” The expression in the original is *Bâlâhatânâm*, which means simply the “money of *Bâla*.” But *hât* in *Kashmir* is also the actual name of one particular coin, which was so called because it was of the value of “one hundred” *ganis*. This is clearly proved by *Abul Fazl*’s account of the coins of *Kashmir*. The list is as follows:—¹³

2 Bârah-ganis [or twelves]	= 1 Panchi [or twenty-five]
4 Panchis	= 1 Hât [or hundred]
10 Hâts	= 1 Sâsnu [or thousand]
100 Sâsnus	= 1 Lakh [or 1,00,000]

Bârah for twelve is as old as *Asuka*’s inscriptions:—*Hât* is the western form of *Sat*=100; and *Sâs* is the contraction for *Sahasra*=1,000, as in *Sâs-bahu* for *Sahasra-bahu*, the thousand armed *Arjuna*. But there is a still more striking proof of the value of *hât*, as its initial

¹¹ *Troyer*’s translation.

¹² *Jogesh Chunder Dutt*. *Calcutta*, 1879.

¹³ *Gladwin*’s *Ain Akbari*, ii. 126.

letter *շ* of the Gandharian alphabet is used in all the Indo-Scythian and Gupta inscriptions as the symbol for 100.

As the existing coins of Toramâna, which are found in considerable numbers in Kashmir, are confined to one class of copper pieces, ranging from 100 to 120 grains in weight, it seems not improbable that what Toramâna did was to collect the old coins called *Bâla-hâts*, and to recoin them as *Dindârs* in his own name. According to Abul Fazl the *hât* of Kashmir was equal to the *dâm* of Akbar, or $\frac{1}{40}$ th of a rupee. But the *dâm* weighs 320 grains, whereas the *hâts* of Toramâna do not exceed 120 grains. The money thus recoined I take to have been the barbarous pieces of the later Kushân princes, whose names are unknown.¹⁴ These pieces vary in weight from 100 to 125 grains, with the king standing on the obverse, and Siva and his Bull on the reverse. The coins of Toramâna and his son Pravarasena are so superior in execution to these coins and to all the contemporary coins of North-west India, that I look upon them as the first real issue of the Kashmir mint. There was no previous king of Kashmir named *Bâla*, and I much doubt whether therero was any previous coinage in Kashmir. In fact Kashmir was or had been generally a tributary province. It was certainly tributary to Asoka Maurya, to the Kushân King Kanishka, and to the White Hun Mihir Kul.

I suppose that the title of *Bâla* refers to tho "great king" of the Kushâns, who had been the suzerain of Kashmir, and that the money called *Bâla-hât* was so named after the "great king"—the *Bâla-Rao* of those

¹⁴ See Thomas, *Prinsep's Antiquities*, Pl. VIII., Figs. 6 and 7, for two specimens of these coins.

times. The coins themselves are very rude copies of the money of the Kushān king Vāsu Deva, the last prince whose name can be traced on the coins. The Greek characters become more and more corrupt. The letter **B** generally remains distinct, but the name reads like **ΒΙΛΟ** or **ΒΙΓΟ**. It is just possible that the name of Raja Bāla may have been derived from these rude coins. One coin, in fact, actually has **ΒΟΛΟ**. All the copper Kushān coins of Mathura and Sankisa have **ΒΙΛΟ** or **ΒΙΓΟ**. I incline, therefore, rather to doubt the existence of any early Kushān king named *Bāla*, and to accept the derivation of the name from *Bāla*, the "great or superior." There is another class of small copper coins of the later Kushān period, which may perhaps be the *Bāla-hat* mintage referred to. They have on the obverse Siva and his Bull (very rude), and on the reverse a symbol which I take to be a rude fire-altar, and on the right the name of *Bāla* in monograms of Indian letters. But whatever may have been the origin of the name, I consider that the money of Toramāna and his son Pravarasena was the initial coinage of the Kashmir mint.

The effort which produced these coins seems to have relaxed rather suddenly, as I cannot refer to any specimen of the subsequent coinage of Kashmir, which can be placed earlier than the accession of Durlabha Vardhana, the first raja of the Nāga dynasty.

Whether my identification of the reigning family of Gandhāra in the tenth century with the last of the Kushān princes be correct or not, I still adhere to my opinion that *Jaipāl* and his successors were Rajputs and not Brāhmans. I have already noted the fact that *Trilochan-pāl* had proposed to wed his son *Bhimpāl* to the daughter of the great Rajput Chandor Rai, Raja of Sirwāwa, "one of the

greatest man in Hind," as Utbi calls him.¹⁵ This fact alone is sufficient to show that the family could not have been Brâhmans.

Albiruni distinctly makes Trilochanpâl a descendant of the Tûrk king Kanishka who built the monastery at Purushâwar. He calls the dynasty the "Shâhiya of Kâbul," and says that the descendants ruled for about sixty generations. Writing in A.D. 1030, after the death of Trilochanpâl, he says, "this *Shâhiya* dynasty is now extinct."¹⁶ The author of the *Raja Tarangini* says the same thing, that by the death of Trilochanpâl the Shâhi dynasty came to an end.¹⁷ The round number of sixty descendants counted as reigns shows that Albiruni looked upon this Shâhi dynasty as the actual descendants of the great Kushân king Kanishka. Taking the mean length of a reign at fifteen years, the actual Indian average, the date of Trilochanpâl will fall nine hundred years after Kanishka, or after A.D. 100 = A.D. 1000, in the reign of Mahmûd of Ghazni, the conqueror of the Shâhi kings.

The result of this discussion shows that *Jaipâl*, the successor of the four Brâhman kings, was not himself a Brâhman, and was almost certainly a Kushân chief who was accepted as a Rajput. I conclude that on the weakening of the Brâhman rule at Kâbul by the attacks of the Muhammadans under Yâkub and Amru bin Lais, A.D. 873—900, the predecessors of *Jaipâl* had gradually recovered the former influence of the family. *Jaipâl* is the first of these Rajputs who is recorded to have fought with Sabuktigin. The two armies met near Langhân in A.H. 372, or

¹⁵ *Târikh-i-Yamîni* in Elliot's *Muhammadan Historians*, ii. 147.

¹⁶ Sachau's *Albiruni*, ii. pp. 10, 11, 13.

¹⁷ *Raja Tarangini*, B. vii, slok, 66.

A.D. 982. In a second great battle fought with Mahmûd in A.H. 392, or A.D. 1001, near Purushâwar, the Hindus were defeated, and lost nearly all of their territory to the west of the Indus, retaining only *Wehand*. Jaipâl was then an old man, and, seeing that he was a "captive in the prison of old age and degradation," he put an end to himself by burning.¹⁸ That he was then a very old man is proved by the fact that his *grandsons* and *sons* were taken prisoners along with himself; and one of these *grandsons*, Brâhman-Pâl, the son of Anand-Pâl, only a few years later opposed Mahmûd near Wehand "at the head of a valiant army," when "the battle lasted from morning till evening, and the infidels were near gaining the victory." The accession of Jaipâl cannot, therefore, be placed later than A.D. 960, and that of his father, Aṣatpâl in A.D. 930. As the Brâhman Kamlüa was reigning in A.D. 900, and was succeeded by his son Bhima Deva, the latter must have been contemporary with Aṣat-pâl. To this Aṣat-pâl, the father of Jaipâl, I would ascribe the ascendancy of the Rajput family, and the consequent fall of the Brâhman dynasty.

¹⁸ "Utbi," in Elliot's *Muhammadan Historians*.

The succession of these two families I make out to be as follows :—

Brāhmaṇas.			Kuśāṅgas.		
Albiruni.	Coins.		825	Kanak . . .	VENKA.
840 Kalar . . .	SPALAPATI		875	—	<i>Rajput.</i>
860 Sūmānd . . .	SAMANTA-DEVA		—	—	Lalliya Shāhi.
900 Kamlu (Kamlañd ?)	KHAMARADAK		900	—	Toramāna Shāhi.
920 Bhima . . .	BHIMA-DEVA		925	ASAT-PAL . . .	?
			950	JAI-PAL . . .	Jaya Pāla Shāhi.
			1002	ANAND-PAL . . .	Ananda-Pāla Shāhi.
			1012	TRILOCHAN-PAL	Trilochana Pāla.
			1021	BHIM-PAL . . .	Bhima-Pāla Shāhi.
			1026		End of Dynasty.

The Shâhi kings, the antagonists of the Ghazni Sultans, were the descendants of the Little Kushâns or Kidaritæ. But what has become of the mass of the Kushâns of the Kâbul Valley? In my opinion, they are now represented by the *Kâfirs* of Chitrâl, who still hold the southern slopes of the Indian Caucasus to the north of the Kâbul River. On the occupation of the Kâbul Valley by the White Huns the Kushâns would naturally have retired to the hills, where they still preserve much of their ancient religion, customs, and language, together with their tribal name of *Koresh* or *Goresh*.¹⁹ In these names I recognise the **KORSAN** of the coins and the *Kushân* and *Gushdn* of the inscriptions. Their claim to a descent from Alexander points to the same conclusion, that they are the descendants of the immediate successors of the Greeks. It is quite possible that some portions of the tribe may have found refuge in the hills to the south of the Kâbul Valley, where the old name would seem to be preserved in the *Koreshan* of Dera Ismail Khan, and the *Goreshan* of Dera Ghâzi Khan.

As the chief of Chitrâl still bears the title of "Shah Kitor," I presume that the name of *Kitor* gradually prevailed over the old name of *Kushân*, and that all the *Kâfirs* of the present day are simply *unconverted* Kushâns. Mahmûd of Ghazni kept a large body of mercenary troops, who were commanded by Tilak of Hind. He (Tilak) afterwards brought many *Hindu Kitors* under the rule of Masâud.²⁰ Two centuries later Changiz Khan, after his campaign in the Hindu Kush, wintered in the mountains of *Buya Kitor*. Nearly two hundred years later, in A.D.

¹⁹ Dr. Bellew's *Ethnography of Afghanistan*, pp. 143, 144.

²⁰ Elliot's *Muhammadan Historians of India*, ii. 127.

1398, Timur describes the people as of "powerful form and of fair complexion," and adds that "their language was distinct from Turki, Persian, Hindi, and Kashmiri."²¹ They had a local era of their own which Timur added to the Hijra date of 800 in his rock inscription describing his victory over them.

²¹ Elliot's *Muhammadan Historians of India*, iii. 401.

DESCRIPTION OF THE PLATE.

No.	Metal.	Thickness.	Grains.	Kidâra Shâhi.	Plate.
1	AR	1.10	56	<i>Bust of the King</i> to the front, with bushy hair on both sides of the face, like the Sasanian Kings; crown with triple ornament; long earrings. Indian inscription in early Gupta letters, <i>Kidâra Kushâna Shâhi</i> , the last letter, <i>hi</i> , being close to the face on the right. <i>Rev.</i> — <i>Fire-altar</i> , with two attendants carrying drawn swords, or perhaps the <i>Barom</i> . Below the altar are three characters, which I take for numerals. They are the same on all my three specimens, although the coins are from different dies. I read them as 889, which, if referred to the Saka era, would be $889 + 78 = \text{A.D. 417}$. [Duplicate, of similar types.]	VI. 1
2	AR	1.10	56	[Author.]	VI. 2
3	AN	0.85	118	King standing to left, as on the earlier Kushân coins of Kanishka and his successors. Indian letters or monograms in three places. To right, <i>Kushâna</i> ; under King's arm, <i>Kidâra</i> ; to left, <i>Kapan</i> (? for <i>Kophane</i>). I conclude, "The Kushân King KIDARA of Kapan." <i>Rev.</i> —The goddess <i>Ardochsho</i> (Lakshmi), seated on throne,	VI. 3

DESCRIPTION OF THE PLATE—*continued.*

No.	Metal.	Inches.	Grains.	Plate.
4	A	0·85	121	<p>King standing as on No. 3. To the left, in Indian letters, perpendicularly arranged, <i>Sri Skhī</i>; and to the right, under the King's arm, <i>Kidāra</i>.</p> <p>Rev.—Goddess, seated, holding trident in left hand. Indian inscription on right, <i>Kidāra</i>, in rather later characters.</p> <p>[Author.]</p>
5	R	1·10	66	<p>Bust of the King to the front, with bushy hair on both sides of the face, and triple ornament on head-dress, like that on <i>Kidāra's</i> silver coins. Long streamers rise up from the shoulders, as on the Sassanian coins.</p> <p>Rev.—Fire-altar, with attendant, on left. Uncertain object on right.</p> <p>[Author.]</p>
6	R	1·0	53	<p>Bust of King to the front, resting on a large crescent; bushy side hair, like that of the Sassanian Kings. Crown similar to that worn by Sapor III., surmounted by</p>

7	R	1.10	54	[Author.] Bust of King, full-face, with bushy side hair. Lappets flying from shoulders. Rev.—Not distinguishable.	VI. 7
8	AE	0.55	31	[Author.] Male bust, full-face, surrounded by a circle of beads. Rev.—Inscription, in two lines, of Indian letters of Indo-Scythian period, <i>Kshatrapa Tarika</i> .	VI. 8
9	ZE	0.55	31	[Author.] Male bust to left, surrounded by a circle of beads. Rev.—Inscription, in two lines, as on No. 8, <i>Kshatrapa Tarika</i> .	VI. 9
10	N	0.75	120	[Brit. Museum. Author.] King standing to the left, as on No. 3. Under the King's arm, <i>Kidara</i> , in Indian letters. To the left, below the King's hand, <i>Isa</i> , in Indian letters. Rev.—Seated goddess, as on No. 3. To right, <i>Sri Vista</i> , in Indian letters.	VI. 10
11	Y	0.75	120	[Author.] King standing to left, as on No. 3. Under King's arm,	VI. 11

DESCRIPTION OF THE PLATE—*continued.*

No.	Metal.	Inches.	Grains.		Plate.
12	A'	0·75	119	Kidâra, in Indian letters. To left, under King's hand, Dhârva. Rev.—Seated goddess, as on No. 3. To right, Sri Kritavîrya, in Indian letters.	[Author.] VI. 12
13	N	0·80	118	King standing to left, as on No. 3; under his arm, Kidâra; to left, —vam. Rev.—Seated goddess. To right, Sri Siladitya, in Indian letters.	[Author.] VI. 13
14	N	0·95	116	King standing to left, as on No. 8. Kidâra under the arm, in Indian letters. To the left, below, dhavain (?) ; the first letter is uncertain. Rev.—Goddess, seated. To right, Sri Kuśala, in Indian letters. [Pale gold. Author. From Gandgarh Hill.]	[Pale gold. Author. From Gandgarh Hill.] VI. 14
15	N	0·95	118	King standing to left, as on No. 3. To left, Sri Śâhi; and under the arm, Kidâra, both in Indian letters. Rev.—Goddess, seated. Uncertain letter on right. [Pale gold. Author. From Gandgarh Hill.]	[Pale gold. Author. From Gandgarh Hill.] VI. 15

A. CUNNINGHAM.

XV.

MARKOFF'S UNPUBLISHED COINS OF THE ARSACIDAE.

(See Plate XVI.)

THERE appeared last year, in the *Journal of the Russian Oriental Society*, an article on unpublished and noteworthy coins of the Arsacidae, by M. Alexis de Markoff. This article marks a distinct advance in the study of Parthian numismatics. It is, however, written in Russian, and, therefore, runs some risk of not receiving the attention which it deserves at the hands of numismatists. M. Drouin has already, in the *Révue Numismatique* (Part I. 1893), given a very able summary and review of this work. It is the object of the present paper not to do again what M. Drouin has already done so well, but, in the first place, to give a complete list of all the coins published by M. de Markoff; and, secondly, to review the work from points of view other than those already occupied by M. Drouin.

For my knowledge of M. de Markoff's article, I am indebted to a Russian scholar, Mr. Edmond Hawtrey, who has furnished me with an English translation.

With regard to the dates of the various reigns, the arrangement adopted by Gutschmid in his *Geschichte Irans* has been followed throughout.

ANDRAGORAS, SATRAP OF PARTHIA.

M. de Markoff states, without definitely accepting, the view put forward by Sir H. Howorth in *Num. Chron.*, 1890, that there were two satraps of Parthia named Andragoras. The former was called Phrataphernes while holding the satrapy under Darius Codomannus, and changed his name to Andragoras when, after the Macedonian Conquest, he was reinstated by Alexander. The latter, a Seleucid ruler of Parthia, was overthrown by Tiridates, c. 241 B.C. It is, therefore, possible that coins bearing the name may be as early as 331 B.C., or as late as 241 B.C. According to Howorth, the coins, both gold and silver, were struck by the first Andragoras. Markoff thinks it impossible to attribute them with certainty, and suggests that the gold may have been struck by the first and the silver by the second Andragoras. He sees a reason for this suggestion in the fact that the gold and silver coins present entirely different types; and he imagines, moreover, that the fabric of the silver coins is later in point of date than that of the gold. This last idea would seem to be purely imaginary; and a distinction between the types of the gold and silver currency is certainly the rule in the coinage from which that of Andragoras would naturally be copied—that of Alexander the Great. Moreover, if these beautiful silver coins were struck by the second Andragoras, it would seem strange that they exercised no influence on the coinage which immediately followed them—the very meagre coinage of the first Arsaces. On the whole, therefore, it would seem probable that all the coins of Andragoras should be assigned to the first satrap of that name, and that their earliest possible date should be fixed at 331 B.C.

The silver coin of Andragoras published by Markoff—No. 1 of his list—is regarded by him as a more perfect specimen than those previously described; and from the evidence afforded by it, he proceeds to correct the accounts given by Sir A. Cunningham (*Journal of the Asiatic Society of Bengal*, 1881), and Professor Gardner (*Cat. Greek and Scythic Kings*, p. 1). For instance, the bird held in the hand of Athena, is, according to this specimen, not, as previously described, an owl, but a raven; and M. de Markoff quotes Ovid (*Met.* ii. 588) and Pausanias (iv. 34, 3) to prove that the raven is a possible attribute of this goddess. At the same time he points out that this particular reverse is borrowed from certain coins of the town of Side; and there can be no doubt that the bird represented on these coins of Side is an owl. Again, this specimen omits the transverse stroke and the middle upright stroke which Gardner gives in the monogram of the silver coin described by him, and which, as M. de Markoff himself points out, really do occur in the monogram of the gold coin. In fact, in noticing these differences M. de Markoff is only pointing out some of the evidences which have led numismatists in England to regard this coin—and others from the same die—as undoubtedly false. Of these coins we have seen at the British Museum, during the last few years, at least three, and perhaps four, different specimens, all struck from the same die. They all come from Rawal Pindi, a notoriously suspicious source—a source from which most carefully executed imitations of rare Bactrian, Parthian, and Seleucid coins are continually coming to England. In this instance, moreover, it is possible to explain the origin of the mistakes made by the Rawal Pindi forger. It is possible to refer them all to one archetype—the silver tetradrachm of

Andragoras published in the *British Museum Catalogue*. This coin comes from the Oxus hoard and passed through the hands of the Rawal Pindi dealers. It has a flaw which affects the head of the owl in such a way as to make it look not unlike a raven. The lines of the monogram mentioned above are in the archetype so indistinct that even the sharp eyes of the Rawal Pindi craftsman may well have failed to detect them. M. de Markoff takes some pains to explain away the rather light weight of the specimen described by him—perfectly preserved as it is, it is still somewhat lighter than the other known specimens which are confessedly worn; but it will be seen that this light weight may, perhaps, admit of a very simple explanation.

TIRIDATES, 248—210 B.C.

Nos. 2 and 3, from the Bartholomaei collection in the Hermitage, are the only known specimens of the bronze coinage of Tiridates, and are here published for the first time. The obverse of each bears the head with the characteristic head-dress of Tiridates, who was, according to Gutschmid's view, the first of the Arsacidae who actually ruled and struck coins as an independent sovereign. The reverse of No. 2 bears an elephant to r., and that of No. 3 a horse to r. The inscription is illegible in both cases. The former coin is called by Markoff a *trilepton*, and the latter a *dilepton*.

ARSACES II., 210—191 B.C.

This is the monarch who has usually been called Artabanus I., for no better reason, it seems, than a conjecture of Vaillant's. The drachm here published—No. 4—from

the Bartholomaei collection, presents a feature which is unique in the coinage of the Arsacidae. The usual border is replaced by a wreath of laurcl. Markoff ingeniously conjectures that this may refer to the result of the war between Arsaces and Antiochus the Great. This result was a peace, the terms of which were so honourable to Arsaces, that he might well have regarded it as a victory.

PHRIAPATIUS, 191—176 B.C.

No. 5, a tetradrachm ascribed by Markoff, chiefly on grounds of iconography, to Phriapatius, has been shown by Drouin to belong to Artabanus. It will therefore be more fitly discussed in its proper place.

No. 6 is a drachm, from the collection of General Komaroff, bearing on the obverse behind the king's head, the letters **MAT**. (They may possibly be read **NAT** or **NAI**.) In other well-known instances the name of the province in which the coin is struck is indicated by an inscription in this position, and Markoff supposes that this **MAT** may be intended to denote *η Ματιανή* or *η Ματιηνή*, a Median province, situated near the Caspian Sea, mentioned by Herodotus, Strabo, and Stephanus Byzantinus. If this be true, we have here an interesting confirmation of an historical conjecture made on other grounds by Gutschmid. The Median provinces were wrested from Antiochus II. by Arsaces II., the father of Phriapatius, but were given back almost immediately. They were again conquered by Phraates I., the son of Phriapatius. Of the events of the intervening reign of Phriapatius we have no certain knowledge; but Gutschmid sees indications which seem to show that war was resumed and that certain Median provinces in the neigh-

bourhood of Matiene were for the second time annexed to the Parthian kingdom.

PHRAATES I., 176—171 B.C.

Under this heading are published four drachms, calling for notice solely on account of legends behind the king's head on the obverse. This legend appears on No. 7 (Komaroff) as **CVΛZ**, and on No. 9 (Bartholomaei) as **< >VZ**—both probably intended for the same, and both no doubt blundered. To attempt any explanation would be a pure waste of time. No. 8 (Barth.) reads **ΕΠΑΡ**. Markoff, adducing as a parallel instance, the **ΣΥΜΜΑΧΙΚΟΝ** of Sicilian coins, would explain this as signifying *ἐπαρχικόν*, and as denoting a *provincial* currency—a *νόμισμα ἐντόπιον* confined to one locality, as opposed to a *νόμισμα πολιτικόν* current throughout the realm. But surely this explanation is very far-fetched. On No. 10 (Barth.) occurs **NICA**, which Markoff unhesitatingly regards as an abbreviation of *Nisaia*, the name of a town in the province of Margiana, probably on the site of the present Herat. This identification would seem to be extremely probable, were it not for the inscription **ΝΙΣΑΚ**, which occurs on a drachm of the same king published by Gardner. In spite of the difference in the form of *sigma*, **NICA** and **ΝΙΣΑΚ** most probably have the same meaning, and *Nisaia* can scarcely be denoted by **ΝΙΣΑΚ**.

MITHRADATES I., 171—138 B.C.

No. 11, a tetradrachm (Hermitage), is of the same type and bears the same monogram as the one published by Gardner from the Paris collection (*Parthian Coinage*, Pl.

I., 17.) Markoff reads the monogram **APT**, and refers it to Artakoana, the ancient capital of the province of Aria, which was taken by Mithradates from the Bactrian monarch Heliocles. A tetradrachm published by Dr. A. von Sallet (*Zeit. f. Num.*, I. p. 312; Pl. VIII. 2), resembles this specimen in most respects, but, instead of the monogram, bears the letters **TY** in the exergue.

No. 12. This tetradrachm, from the Hermitage collection, has, in the field of the reverse in front of the feet of Arsaces, a date **OP** = 170 A.S. = 142 B.C. The dates previously known to occur on tetradrachms of Mithradates are **ΓOP** and **ΔOP**. This coin has both a monogram, which Markoff does not attempt to explain, and the letters **KA** in the exergue.

No. 13 is a tetradrachm of Greek fabric from the Hermitage, having the date **ΓOP** and a monogram which Markoff reads **ΦY** and proposes to identify with **Φιλακίη**, the name of a town near Discarth, in Persia, which seems to be mentioned by only one Greek author (Longpérier, *Iconog.* p. 22, note 2). The similar tetradrachm published by Gardner has a monogram, somewhat differently formed, which may be resolved into the same two letters.

Under the heading of money coined for Bactria, Markoff describes a drachm, No. 14, from the collection of Baron Chaudoir in the Hermitage. This drachm has been published by Chaudoir himself in his supplement to Sestini (p. 19, Pl. IV., 35), and the class to which it belongs seems to have been very variously attributed, by Chaudoir to Artabanus I (= Arsaces II.), by Subhi Pasha to Tiridates, and by Longpérier to Phraates I. The reason of its ascription to Bactria is not evident and is not explained by Markoff.

PHRAATES II., 138—128 B.C.

No. 15 is a drachm (Olsheffsky) having the name **ΑΡΕΙΑ** in the inscription of the reverse. This is an addition to the list of drachms bearing the names of provinces of the Parthian Empire. Areia was the most fertile district of the province of Ariana, and the two names are frequently confused by the geographers. It was adjacent to Margiana, the name of which also occurs on the drachm first published by von Sallet (*Zeit. f. Num.*, vol. iii. p. 246). These provinces were conquered by Mithradates, and taken from Heliocles. They were subsequently seized by the Scythians; and Gutschmid supposes them to have been again added to the Parthian kingdom by Phraates II. Another drachm bearing the name **ΤΡΑΞΙΑΝΗ** was published by Gardner (*Parthian Coinage*, p. 33, Pl. II. 12); but no adequate explanation of the name has hitherto been suggested. Markoff now offers one which, to say the least, is extremely ingenious. The letter Ξ is by no means certain. Very little distinction can be made between it and the form of Σ occurring in other parts of the same inscription. Markoff therefore supposes the true reading to be **ΤΡΑΣΙΑΝΗ**, and this, by a very common metathesis, to represent the town or province of Tarsiana. According to Ptolemy there was a town of this name situated in the corner of the Parthian Empire in Karmania, on the banks of the river Sagan, not far from cape *Ταρσίνη*.

ARTABANUS I., 128—123 B.C.

As mentioned above, the tetradrachm No. 5 (Bartholomaei) has been shown by Drouin in his review of Mar-

koff's work to belong to the period of Artabanus. The date, which could not be read with certainty on the Russian specimen, is undoubtedly $\text{HΠΡ} = 188 \text{ A.S.} = 124 \text{ B.C.}$, as shown by a cast sent to Drouin by Dr. Imhoof-Blumer, and also by two fine specimens of this type recently acquired by the British Museum. Dependent on the true attribution of this series of coins are a number of interesting numismatic problems, which I will try to state as clearly, but as briefly, as possible. A tetradrachm of this type was first published by von Sallet in 1874 (*Zeit. f. Num.* I. p. 307, Pl. VIII. 3); but, instead of the letters HΠΡ in the exergue, it has two monograms, each of which would admit of various interpretations. Von Sallet saw that the reverse type—Demeter seated—was borrowed from a tetradrachm of Demetrius Soter, and could, therefore, not be earlier than 162 B.C. On other grounds he attributed the coin to Phraates I., whose date is usually placed from 176 to 171 B.C. Friedländer, who supported von Sallet's view, agreed with him in extending the limits of this reign to at least 162 B.C. But it is fairly certain that Mithradates I. was already on the throne in 171 B.C., and the difficulty was only to be explained by supposing that the brothers reigned conjointly for some years, a supposition for which there is no warrant. Another element of difficulty was added to the puzzle by the publication of a drachm from the collection of Count Prokesch-Osten bearing the date 125 A.S. = 187 B.C. The head on the drachm bears a striking likeness to that on the tetradrachm, and, without direct proof to the contrary, no one would probably hesitate to recognise them as portraits of the same king. This date 125 A.S. = 187 B.C. would fall within the period usually assigned to Phriapatius (191—176 B.C.); and Markoff, not having the evi-

dence of the date ΗΠΡ on his tetradrachm, ascribes it to that reign, and supposes that an archetype from which the reverse might have been copied may have existed in the Seleucid coinage previous to the reign of Demetrius Soter, although no specimen of such a coin has come down to us. Friedländer, on the other hand, still holding to the attribution of the tetradrachm to Phraates I., is forced by the evidence of the drachm also to extend the other limit of this king's reign so as to include the date 125 A.S. This would give Phraates I. a reign from at least 187 B.C. to at least 162 B.C. There are very many difficulties in the way of accepting this result. It may be that, in spite of the striking resemblance between the portraits, the drachm and tetradrachm should after all be attributed to different monarchs.

There occurs to me a possible solution of the difficulty, which I put forward with the greatest diffidence. It is well known that the Parthians used an era the starting point of which was 249—8 B.C. Undoubted instances of dates in this era have not, so far as I am aware, been found on the coins. Is it possible that we have one here? The date on the drachm, 125, would, in this Parthian era, correspond to 124—3 B.C., practically the same date as that of the tetradrachm. The confusion that would have resulted makes it improbable that two different eras would have been used promiscuously without the slightest mark of distinction, but it is certainly possible that, at this period, the Parthian era may have been used in certain provinces and the Seleucid era in others.

But we have not yet come to the end of the difficulties connected with the attribution of these coins having Demeter seated as their reverse type. Specimens recently acquired by the British Museum show three distinct por-





traits, and, unfortunately, the date is only to be read on those specimens presenting the portrait already known from the tetradrachms published by von Sallet and Markoff. Of these there are two:—

1. *Obv.*—Bearded head of king, diad. r.; border of reels and beads.

Rev.—ΒΑΣΙΛΕΩΣ ΑΡΣΑΚΟΥ. Demeter seated on throne l., holding in l. arm cornucopiae, and on r. hand figure of Niko with wreath. In exergue, ΗΠΡ; mon. l. Η.

AR. Size 1·15. Wt. 234 grs. [Pl. XVI. 1.]

2. *Obv.*—As No. 1.

Rev.—Similar to No. 1, but with the addition in l. field of the letters ΘΕ. Monogram indistinct, but probably the same as on No. 1.

AR. Size 1·2. Wt. 239 grs. [Pl. XVI. 2.]

(This coin seems to be similar to that of which Dr. Imhoof-Blumer possesses a cast in silver.)

3. *Obv.*—Head of king l.; border of dots.

Rev.—ΒΑΣΙΛΕΩΣ ΜΕΓΑΛΟΥ ΑΡΣΑΚΟΥ ΦΙΛΑΔΕΛΦΟΥ ΦΙΛΕΛΛΗΝΟΣ. Arsaces seated r. In exergue, ΕΚΡ.

AR. Size 8. Wt. 61 grs. [Pl. XVI. 3.]

The next variety differs in the portrait, which is that of a man apparently older and wearing a beard longer and more flowing.

4. *Obv.*—Bearded head of king, diad. r.; border of reels and beads.

Rev.—Type and inscription similar to No. 1. No date or monogram legible.

AR. Size 1·1. Wt. 224·5 grs. [Pl. XVI. 4.]

These two varieties agree in having the simple inscrip-

tion ΒΑΣΙΛΕΩΣ ΑΡΣΑΚΟΥ. The third variety has a longer inscription.

5. *Obv.*—Head of king with slight beard, diad. r.; border of reels and beads.

Rev.—ΒΑΣΙΛΕΩΣ ΑΡΣΑΚΟΥ ΕΠΙΦΑΝΟΥΣ ΦΙΛΕΛΛΗΝΟΣ. Demeter seated, holding cornucopiae, and Nike as on No. 1. In exergue, TY, and mon. .

R. Size 1·2. Wt. 213 grs. [Pl. XVI. 5.]

The portrait on this tetradrachm will be seen to present considerable resemblance to that on the drachm, bearing the date 189 A.S.=123 B.C., which has been assigned to Himerus (or Euhemerus), Satrap of Babylon (Gardner, *Parthian Coinage*, p. 34, Pl. II. 16), an attribution which Gutschmid declares to be without adequate foundation. But, however striking may be the likeness between these two portraits, cogent reasons against their identity are to be found in the fact that both the types and the inscriptions of tetradrachm and drachm are different. For the purpose of comparison a description and autotype representation of one of these drachms attributed to Himerus is here given.

6. *Obv.*—Head slightly bearded, diad. r.; border of reels and beads.

Rev.—ΒΑΣΙΛΕΩΣ ΜΕΓΑΛΟΥ ΑΡΣΑΚΟΥ ΝΙΚΗΦΟΡΟΥ. Nike l., holding wreath and palm. In exergue, mon. ; in field l. Ι.

R. Size 1·75. Wt. 62·5 grs. [Pl. XVI. 6.]

The tetradrachms above described offer a puzzle in Parthian numismatics of which I can offer no solution. All that can be suggested as to their relative date is, that the first two varieties (Figs. 1, 2, and 3 in the Plate) may well have been imitated from coins of Demetrius Soter

(162—150 B.C.), and the third variety, with an inscription of four lines and the title ΦΙΛΕΛΛΗΝ, from coins of Demetrius Nikator (first reign, 145—140 B.C.). Compare Babelon's *Rois de Syrie*, Pl. XVI. 14, with Pl. XIX. 3, and figures 7 and 8 in the plate appended to this article.

No. 16, a drachm (Komaroff) is interesting as being countermarked with the head of an Arsacid king, probably that of Pacorus I.

MITHRADATES II., 123—88 B.C.

No. 17 (Hermitage) is a triobol, and the only specimen of this denomination known. Its weight is 1.73 grammes = 27 grains. Hitherto the only denominations known to exist are obols, drachms, didrachms (see Mionnet, *Descr. des Méd.*, v. p. 650, 7 and 8—the former probably false), and tetradrachms. The description of this triobol leads Markoff into a long excursus on weight standards, which must be stated here as briefly as possible. He sees evidence to show that, in Parthian currency, the Attic drachm of rather light weight—4.20 grammes=65 grains—was gradually supplanted by the Phœnician drachm of 3.73 grammes=58 grains, or rather less. The Phœnician standard was introduced into the Seleucid coinage in the reign of Alexander Bala and lasted till the time of Antiochus IX., when it fell into disuse. In Parthia it began to be used in the reigns of Phraates I. and Mithradates II., and gradually superseded the Attic standard. This victory of the lighter standard is explained by Markoff from the fact that during the century before and two centuries after Christ, the Parthian drachm and the Roman denarius constituted almost the sole currency of this part of Asia. The denarius struck for Asiatic circulation gradually de-

generated in quality and weight, and the drachm, its rival, was obliged to move in the same direction.

ORODES I., 57—37 B.C.

Nos. 18 and 19 (Bartholomaei) are drachms counterstruck with the characteristic mark of the Indo-Parthian king Gondophares. The occurrence of this countermark on coins of Orodes I. and Artabanus II. has already been noticed by von Sallet (*Zeit. f. Num.* viii. p. 291).

Nos. 20 and 21 (Bartholomaei) are diobols. Specimens of this denomination are exceedingly rare. In another learned metrological excursus Markoff undertakes to prove that the obols and diobols, as well as the drachms, were struck to two standards, the Attic and the Phœnician.

PACORUS II., 78—110 A.D.

No. 22, a drachm (Bartholomaei), is interesting as having the Chaldaeo-Pahlavi characters for PK behind the head on the obverse. These Pahlavi letters in this position are otherwise not known to occur before the time of Mithradates IV.

VOLOGESES II., 78—79 and 112—148 A.D.

This drachm, No. 23, from the Olsheffsky collection, bears a striking resemblance to the drachm of Pacorus II., just described. It is very probably the work of the same engraver, and is to be ascribed no doubt to the period during which Pacorus II. and Vologeses II. reigned together. The Pahlavi letters on the obverse are VLM, and are interpreted by Markoff as denoting the name of Vologeses, with the addition of the title *Malka*, or king.

ARSACIDAE OF ELYMAIS.

No. 24 (Bartholomaei) is a very rare drachm of Kamnaskires and his wife Anzaze. A similar specimen is described by von Sallet in *Zeit. f. Num.* vol. viii. p. 212. The attribution of these coins of Kamnaskires to the kingdom of Elymais is due to Gutschmid. He supposes that, after the conquest of Elymais by Mithradates I., a branch of the royal Arsacid family was placed on the throne, and that this dynasty included not only Kamnaskires, but also the Arsaces, whose tetradrachm was attributed by Gardner (*Parth. Coins*, p. 16, Pl. II. 13) to Phraates I. This attribution is supported by the *trouvaile* of these coins.

INDO-PARTHIAN KINGS.

Nos. 25—27 are varieties (all from the Bartholomaei collection) of the Parthian type of drachm, struck by Gondophares, of which a specimen was first published by von Sallet in 1878. Gondophares is known to us from three sources—coins; the inscription found at Takht-i-Bahi, north-east of Peshawar; and the apocryphal Acts of St. Thomas. As to the locality of his kingdom, the evidence of finds points to Kandahar and Sistan in the west, and Sindh and the Panjâb in the east; and, as will be seen, it is probable that he was contemporary with Kujula Kadphises, who ruled over the Kabul valley. His date is approximately determined by the inscription and the Acts of St. Thomas, and their evidence is supported by the coins. The inscription is dated in the twenty-sixth year of the King Gondophares, and this date is equivalent to the year 103 (according to Cunningham, who is the most

trustworthy authority in this matter) of some era which is not explained. If, with Cunningham, we suppose this era to be that of Vikramāditya, the starting-point of which is 57 B.C., we obtain the following result: 57 B.C. + 103 = 46 A.D. = the twenty-sixth year of Gondophares' reign. As St. Thomas is supposed to have made his journey *εἰς ἀσπασμὸν Γουνδαφόρου τοῦ Βασιλέως* in A.D. 29, according to the true chronology, it will be seen that the date derived from the inscription is quite consistent with this. Mommsen (*Hist. de la monnaie romaine*, iii. 337) has given a reason for the scarcity of the silver coinage of Gondophares and the other members of the same dynasty. It appears that the Roman merchants palmed off on the unsuspecting Asiatics a spurious currency, and received in return drachms of genuine silver, which were immediately melted down.

SANABARES.

Nos. 28—31 (all from the Bartholomaei collection) are drachms of Sanabares. The main interest of these—and especially of No. 28—lies in the Chaldaeo-Pahlavi inscriptions which appear on the obverse. The discussion of these raises several interesting points of Pahlavi grammar and palaeography on which I am not competent to form an opinion. They are all ably discussed, with a full knowledge of the subject, by M. Drouin, in his review. It may, however, be mentioned here that the date, **ΓΙΤ**, read on these coins by Thomas, Gardner, and others, cannot any longer be supported. These letters appear in many different forms—e.g. **ΙΓΤ**, **ΤΤΤ**, **ΙΤΙΓΤ**, &c.—and must remain, for the present, unexplained.

INDO-SCYTHIAN KINGS OF THE TURUSHKA DYNASTY.

Nos. 32 and 33 (from the Grant collection in the Hermitage), and No. 34 (Komaroff, engraved in the text), are specimens of those rare coins called by Thomas "Indo-Parthian," and described by him, from specimens in the collection of Count Stroganoff, in the *Num. Chron.* for 1870, and elsewhere. They are still as mysterious almost as ever, and no successful attempt has yet been made to read the inscriptions. No. 34 is interesting as being a copper coin. Silver specimens only were known previously. Markoff points out that these coins are found in Afghanistan and North India, that they bear symbols like those used by Kanishka, that their fabric is imitated from the Sassanian rather than from the Parthian coinage, and that they are, therefore, certainly not older than the third or fourth century A.D. Drouin supposes them to have been issued by the Ephthalites before their expulsion from Sogdiana by the Turks in 555 A.D. These coins will be discussed in an article by Sir A. Cunningham on the White Huns which, it is hoped, will appear in a future number of the *Numismatic Chronicle*.

The remainder of M. Markoff's paper is devoted to the description of barbarous imitations of the staters of Alexander (Nos. 35—44), of a Parthian drachma (No. 45), and of a Roman denarius (No. 46).

From this analysis of M. de Markoff's paper it will be seen that he has made a valuable contribution to the study of Parthian numismatics, both on account of the new facts which he has added to our previous knowledge, and from the great learning which he has brought to bear on many difficult problems which still await a final solution.

E. J. RAPSON.

XVI.

A NEW SAXON MINT, WEARDBYRIG.



IN the recently published volume of the *Proceedings of the Society of Antiquaries of Scotland*¹ is an interesting notice from the pen of a member of the Numismatic Society, Mr. A. B. Richardson, F.S.A.Scot., and Curator of the Cabinet of Coins at Edinburgh, of a hoard of broken silver ornaments and Anglo-Saxon and Oriental (Sámánee Series) coins found in Skye. The hoard consisted of 110 coins, of which two were fragments only, and is classified by the author as follows:—

	No. of Coins.
Eadweard the Elder	32
Æthelstan	57
Plegmund, Archbishop of Canterbury	1
Sitric of Northumbria	1
Similar type, uncertain	1
Ismaeel Ibn Ahmad	5
Ahmad Ibn Ismaeel	4
Nasr II. Ibn Ahmad	9
<hr/>	
	110
<hr/>	

¹ Vol. xxvi., or third series, vol. ii. p. 225.

The coins are for the most part of types already known, though the Sitric is a variety of that figured by Mr. Rashleigh, in *Num. Chron.*, N.S., vol. ix., Pl. II. 19, and appears to be unpublished. It is, however, so barbarous in its execution that it might almost as well be regarded as a penny of St. Peter as one of Sitric. The uncertain coin is noteworthy, as it has a sword to the left on the obverse, dividing an unintelligible legend somewhat like those on the rude coins of St. Peter, and a T hammer on the reverse, with the legend +MANA MO·T. It will be remembered that a Manna was a moneyer both of Eadweard the Elder and of Æthelstan..

Among the coins of both Eadweard and Æthelstan are several with a building on the reverse, but the most interesting is that of which, thanks to the Council of the Society of Antiquaries of Scotland, a representation is given at the head of this paper.

The type is the common one, Ruding, Pl. XVIII. 23, &c., with a small cross on both obverse and reverse, but the legend on the obverse is +:ÆDELSTAN REX BRITÆ: and on the reverse + BYRHTELM MOT YEARDBV. The title given of Rex Britannæ, instead of as usual Rex totius Britannæ, is remarkable, and in some measure connects the coin with those giving the title of "Rex Saxonum," of which one, struck at Derby by HELENREDES M⁵ ON DEORI, like that in the Hunter collection (Fountaine, Pl. II. 21) was present in the hoard. By a slip of the pen the author of the paper has assigned this coin to Canterbury.

In an account of a hoard of Anglo-Saxon coins found in Meath, which I published in the *Numismatic Chronicle* for 1885,² I have shown that these "Rex Saxonum" coins

² Third series, vol. v. p. 128.

were certainly struck at four towns—Derby, Nottingham, Oxford, and Tamworth, and probably towards the beginning of the reign of *Æthelstan*. Two of these towns, Derby and Nottingham, were among the five boroughs of the Dane-law, and Derby, together with Leicester (of which place no such coins are known) succumbed to the Lady of Mercia, *Æthelflæd*, shortly before her death. The coin of *Æthelstan*, which I am now discussing, is also connected with the history of the Lady of Mercia, as has indeed been already pointed out by Mr. Richardson in his account of the Skye coins. I am tempted to follow this history at somewhat greater length than he has done.

Old Speed, in his *Historie of Greate Britaine*,³ gives a succinct abstract of her career, when writing of King Alfred. “*Ælfleda*, the eldest daughter and first child of King *Ælfred* and Queen *Ælswith* his wife, was married to *Ethelred*, Duke of *Mercia*, who in respect of his marriage, was suffered to have all roiall iurisdiction ouer that Country, in as ample manner as the Kings thereof had enjoyed; and after the decease of her husband, which happened in the yeere of our Lord 912: shee continued the gouernment in the same sort 8 yeres with such resolution and valiant resistance of the common enemy (the *Danes*), that shee stood her brother *Edicard* in great stead, as in the relation of his life shall be further shewed. Sho died the fifteenth *June*, 919, and was buried in *S. Peter's* Church at *Gloucester*, leauing issue a daughter named *Ælsvin*, whom King *Edicard* her brother deprived of that *Duchy*, which her own mother enjoyed, and he his crowne by her assistance.” In his further account of her warlike deeds Speed terms her “another *Zenobia*.”

In Green's *Conquest of England*⁴ it is pointed out that

³ Second edition, 1623, p. 389.

⁴ P. 144, note.

Æthelred was an Ealdorman under Burgred c. A.D. 872—4, but that his first extant charter under Ælfred is of the date A.D. 880, as “dux et patricius gentis Merciorum.” At that time he was already married to Æthelflæd, who signs the charter (Ego Æthelflaed coniunx subscribens confirmaui). In a charter of 901, Ælfred's last year of reign, there is no mention of Ælfred, but of “Æthelred Æd(elflaedque), dei gratiâ monarchiam Merceorum tenentes honorificeque gubernantes et defen-dentes.” They seem, indeed, for all practical purposes to have been king and queen of Mercia, though no coins of either of them are known. At the time of Æthelred's death in A.D. 912, the greater part of northern and eastern England was held by the Danes, whose kings Ecwils and Halfdene had been slain in battle with the Mercians and West Saxons in the previous year. After his death, the valley of the Thames from Oxford to London was taken over from Mercia by Eadweard, who fortified his territory against the Danes in Essex by building the “burhs” at Hertford, and subsequently at Witham.

Æthelflaed on her part strengthened her western frontier against the Welsh by forts at Scargate—uniden-tified—and Bridgnorth. She had previously constructed a burh at Bremes-byrig, probably Bromborrow, in Cheshire, where she is said to have founded a monastery. In A.D. 913, early in the summer, she built the burh at Tamworth, and before Lammas, that at Stafford. The next year we find her building Eddisbury, in Cheshire, and then Warwick.

In 915 we hear of her building Cyric-byrig, now Chir-bury, in Shropshire, Weard-byrig, of which we shall hereafter have to speak, and Runcorn at the confluence of the Weaver and the Dee.

In A.D. 916 *Æthelflæd* obtained a victory over the Welsh; and, having now secured her frontiers, the next year, before Lammas, she obtained possession of Derby; where, however, were slain within the gates four of her thanes, which caused her great sorrow. In A.D. 918 she obtained possession of Leicester by treaty, and the men of York covenanted to surrender to her. But in that same year, twelve days before Midsummer, came the end, and she died at the burh of Tamworth, which she had built some years previously. I have taken the dates from what Mr. Green terms the Mercian Chronicle, but according to the Winchester Chronicle *Æthelflæd* did not die until A.D. 922, and probably this date is the more correct of the two.

In connection with *Weardbyrig* there is a very interesting fact, that the only existing charter of *Æthelflæd*, the Lady of Mercia, is dated from this place. It relates to lands at *Fernbeorngen*⁵—apparently Farnborough, in Berks—which had formerly been granted by *Offa*. In the deed she describes herself as “*gubernacula regens Merciorum*,” and it is dated “*die V Idus Septembris in loco qui dicitur Weardburg*.” The year, however, is given as 878, which is evidently erroneous, so that Thorpe is justified in saying that the genuineness of the document is more than doubtful, and Kemble also has marked it with an asterisk as being either a forgery or of doubtful authenticity. While accepting it as false, I am inclined to regard it as based upon a genuine document, and this view is substantiated by the fact that one of the witnesses is “*Æthelhun episcopus*.” As *Æthelhun* succeeded to the see of Winchester in A.D. 915, and died in 922, the date in the docu-

⁵ Kemble, No. CCCXLIII. Thorpe's *Diplomatarium Anglicum*, p. 175.

ment that he is made to witness is evidently wrong. Assume, however, that DCCCLXXVIII. was an erroneous copy of DCCCCXVIII., we should have *Æthelhun* already a bishop, the burh of Weardbyrig already constructed, and *Æthelflæd*, if the Winchester Chronicle be correct, still reigning over Morcia. Another argument in favour of the charter being derived from a genuine document is that the “*Ælfwyn episcopus*,” who signs immediately after *Æthelflæd* and before another “*Ælfwino episcopus*,” was probably, as Thorpe suggests, “*Ælfwyn filia Æthelflede*.”

What appears to be another place of the same name occurs in charters from A.D. 856 to 949⁶ in the form of *waendæs beorh*, or *weardæs beorh*, but merely as one of the bounds of property at Ashbury, Berks. All these charters are of somewhat doubtful authenticity. The “*Wardeburg cum omnibus ad se pertinentibus*”⁷ mentioned in a charter of Edward the Confessor to the Church of Ramsey, seems also to be another place.

Florence of Worcester under the year 916 mentions *Æthelflæd*’s building of “*Weardbirig*,” and Henry of Huntingdon under the same year mentions Wardebirch as having been built during the summer.

I was in hopes that some trace of the Saxon burh might still be in existence at Warborough, so as to place its identification with Weardbyrig beyond the range of uncertainty. I have, however, been in communication with the Rev. F. Chalker, who for many years has been vicar of the parish, and have also visited the place myself, but without being able to discover the remains of any burh or fortification. It is, of course, possible that the

⁶ Kemble, *l.c.*, 1056, 1148—1178.

⁷ Thorpe, *l.c.*, p. 382.

burh may have consisted of a fortified camp without any mound being thrown up, and that the two parallel roads leading up from the old Dorchester road to the village of Warboreugh may give the width of the encampment, which in such a case must have been upon much the same site as the existing village. In corroboration of this view I may mention the fact that the three sets of fields which lie between these two roads and extend from the village to the river Thames are still known as the Homo Berry (Bury?) Field close to the village, the Middle Berry Field, which extends to the Roman road, and the Lower Berry Field that lies between the road and the river. The system of having a burh on either side of a navigable river was quite in accordance with the strategical tactics of the days of Eadweard. In A.D. 912 he commanded the northern burh to be built at Hertford between the Mimra, the Benefica, and the Lea; and in the same year, shortly afterwards, he constructed the other burh at Hertford, on the south side of the Lea. This latter appears still to exist incorporated with the fortifications of the castle, which are of somewhat later date. The northern burh has not as yet been identified, but the name Danesbury, which is given to a piece of elevated ground on the north side of the Lea, at some little distance from the southern burh, is suggestive of the burh against the Danes having been in that neighbourhood. Wardborough, however, on the left bank of the Thames, would have been at a still greater distance from Wallingford, where the castle lay on the right bank of the river.

Of the other burhs thrown up by Eadweard and *Æthel*-*flæd* there are not many which have become noted as the site of mints soon after their foundation. Of Tamworth,

however, I have published a penny of Æthelstan struck by MANNA MOT ON TOMTEARÐLE, and the same king coined at Derby, Nottingham, and Stafford. Unfortunately the coins of his father, Eadweard, never record their place of mintage. We find, however, Burhhelm and Byrnelm in the list of his moneyers, who possibly may be the same person as the moneyer who describes himself as Byrhtelm on the Weardbyrig coin. Lindsay, in his *Coins of the Heptarchy*, gives Burhhelm as a moneyer of Æthelstan,⁸ but does not connect him with any town, nor does he place Weardbyrig on his list of mints. Ruding, in his list of towns at which Æthelstan struck coins, ascribes WE to Worcester, and may be right in doing so; but the mischievous plan that he and other writers on English coins have adopted of severing mints and moneyers renders it impossible to say that the coin bearing WE was not struck at Weardbyrig, especially as Burnelm appears in his list of moneyers. So far, however, as the coin from Skye is concerned, there can be no doubt that it was coined at Weardbyrig, while the identification of this place with Wardborough, or Warborough, in Oxfordshire, if not beyond all cavil, may still be regarded as founded on reasonably safe grounds, especially as coins struck at Oxford occurred in the same Find.

JOHN EVANS.

NOTICES OF RECENT NUMISMATIC PUBLICATIONS.

A History of Currency in the British Colonies, by Robert Chalmers, B.A. Printed for H.M. Stationery Office, London, 1893.

Although this book is not primarily or essentially a numismatic work, no student of the coinage of the British Colonies can fail to be deeply grateful to the author, who, without any special interest in numismatics, has compiled a work, based on official records, which will henceforth rank side by side with Ruding. The title of Ruding's monumental work was the *Annals of the Coinage of Great Britain and its Dependencies*, 1840. If Mr. Chalmers had been a little less modest he might, without undue pretension, have entitled his work *The Annals of the Coinage of Greater Britain from the Earliest Times to the Present Day*.

The plan which the writer has followed in the compilation of this volume has been to start with the series of legislative enactments governing the currency of each colony, and to fill in this outline from hitherto unpublished official despatches preserved in the Record Office.

The arrangement of his material is in the main geographical, modified by historical considerations. The earlier currency of the British colonies consisted largely of foreign money, such as the Spanish dollar or "piece of eight," and the writer, in an appendix, gives a history of these issues more complete than any which has yet been written.

The history of the currency of the British colonies during the last three centuries is a subject so intricate and complicated that it hardly admits of being dealt with in a consecutive and uniform manner. Notwithstanding this difficulty, the author has succeeded in imparting to his work a general harmony of outline which will be appreciated by any one who reads his introductory chapter.

The writer begins by dividing the history of colonial currency into three historical epochs, the first of which comprises the period before 1704, during which the currency of the West Indian colonies and mainland plantations consisted, in the less advanced settlements, of commodities such as tobacco, sugar, cotton, &c.,

and, in the more prosperous, of Spanish "pieces of eight" and other foreign coins, more or less clipped and overvalued in terms of sterling silver. Throughout this period the regulation of colonial currency had been left to the colonies themselves, but the general confusion which prevailed induced the home government to introduce a law, in 1704, by which it was made illegal for any one to receive silver money at more than its declared value. This Act proved inadequate; but one of its indirect results was to drive the West Indian Colonies to adopt gold instead of silver as their standard, as the law took no cognisance of gold money, and to compel the North-American Colonies to take refuge in paper money.

For more than a century from this time the state of the currency in the colonies lapsed from bad to worse, until it became quite impossible to retain silver coins in circulation; dollars and their parts were cut up and the fractions circulated at a nominal value in excess of their intrinsic metal weight.

It was not until the Act of 1816, which established gold monometallism in the United Kingdom, that silver, henceforth in England only a token currency, could be maintained in circulation. This Act, however, did not materially affect the colonies. Remedial legislation was not seriously undertaken until 1825, and subsequently again in 1838; and even since that time many anomalies have continued to exist even down to the present day, such, for instance, as the continued circulation of light gold coins which have been demonetised in the United Kingdom. These and other still more serious problems, especially the burning question as to which monetary standard is finally to prevail in our Indian dominions, remain as yet unsettled. The policy favoured by the Government of India is to replace silver monometallism by bimetallism; while, on the other hand, the adherents of a gold monometallic standard for India are endeavouring to put a limit upon the coinage of silver.

In the present work the history of the coinage of each colony is separately discussed, the second chapter being devoted to America and the West Indies, commencing with Barbados, the currency of which, from an historical point of view, is of greater interest than that of any other colony. Chapter III treats of the African colonies from Sierra Leone to the Cape. Chapter IV deals with the coinage of Australasia; Chapter V with the Mediterranean colonies—Gibraltar, Malta, and Cyprus; and Chapter VI with India and the Far East.

In the two Appendices are histories of the numerous foreign denominations which for a long time were the only currency of our colonies, and transcripts of the various legislative enact-

ments affecting the coinage of British colonies from the time of Queen Anne to the year 1893.

As a compilation of historical data illustrating the growth and development of the currency of our colonies, Mr. Chalmers's work is a veritable storehouse of knowledge which cannot fail to prove invaluable as a safe guide in all future legislation.

The student of colonial numismatics will also find, scattered up and down its pages, a mass of information and minute details concerning the various coins current in, or issued by or on behalf of our colonies, which he might search for in vain in works more strictly devoted to numismatics.

The *Revue Numismatique*, Part II., 1893, contains the following articles:—

1. REINACH (TH.). On the preperial value of gold and silver in Greek antiquity. As I have already given (p. 146) the main outlines of M. Reinach's interesting paper, I need only here remark that the conclusions at which he has arrived seem to be fully borne out by the texts and numismatic facts which he cites as confirmatory evidence. Perhaps the most noteworthy portion of M. Reinach's treatise is his satisfactory explanation of the much discussed and hitherto always misunderstood line in the comic poet Crates quoted by Pollux from his comedy *Lamia*:—

'Ημίεκτον ἔστι χρυσοῦ, μανθάνεις ὅκτὼ 'βολοί.

He shows that the explanations suggested by Mommsen, Hultsch, and F. Lenormant are all untenable, and that Meineke, the editor of Pollux, was, no doubt, right after all in taking the word *ἡμίεκτον* to mean, in this passage, not a piece of money, but the twelfth part of a medimnus of corn, which, at the excessive price of eight obols, he says (metaphorically, of course) was "worth its weight in gold." Thus all the hypotheses which have been constructed on the supposition that the *ἡμίεκτον* alluded to was the twelfth of an Athenian gold stater, or the twelfth part of one or other of the Asiatic electrum staters, may be set aside as equally worthless.

2. DREUIN (E.). On the coins of the Sassanian queen *Borān*, called by the Persians *Purāndokht* (پران دخت), or the Princess *Purān*. This lady was the eldest daughter of King Chosroes Parviz and of the Princess Mary, daughter of the Byzantine Emperor Maurice. She was placed upon the Persian

throne in A.D. 630, and she secured the friendship of the Emperor Heraclius by restoring the wood of the Holy Cross which had been carried off from Jerusalem by Chosroes II in 614. Queen Borane was deposed in A.D. 631. The writer knows of only six coins of this queen, of which two were formerly in the Subhi collection, and of which two are now in the Berlin collection, one in his own collection, and one in the collection of M. Friedlaender at Paris.

3. CASANOVA (P.). "Notes on Himyarite coins" contains some interesting suggestions, but throws no additional light upon the interpretation of the very remarkable inscription in cursive characters of an unknown alphabet first published by me in the *Num. Chron.* 1878, pp. 278—284.

4. PROU (M.). On a Merovingian triens inscribed DVNO-DERV F. The author thinks, from the style of the bust on the obverse, that Duno-dero, or the "Fortress of Dunos," is to be looked for in the neighbourhood of Orleans. The name of the monetarius on the reverse of this triens is ALTEGISELVS.

5. RICHARD (A.). Observations on the silver mines and the mint of Melle under the Carlovingians. The writer attributes to this mint, an insignificant place in Poitou, celebrated, however, for its rich mines of lead mingled with silver, the entire series of Carlovingian coins with the word METALLVM or METVLLO on the reverse. The mint of Melle was first opened by Lonis le Débonnaire, who issued coins of various types with the legend METALLVM. Charles the Bald began by striking coins with the same legend, which he afterwards changed for that of METVLLO in combination with the monogram invented by his nephew Pepin II. The issue of coins in the name of Charles the Bald was continued after his death by the Counts of Poitou, whose coinage may be distinguished by the cross inserted in the middle of the word METVLLO (MET⁺VLLO). This style continued to be used down to the beginning of the tenth century, about which time the legend changes to METALLO in two lines.

6. BORDEAUX (P.). Unpublished coins of Charles X., "King of the Ligue," 1589—90; a "Douzain," issued by the "Parti des Politiques," at Narbonne, in the name of Henry III, five years after his death in 1594; and "Piedforts" of Louis XIII.

7. BLANCHET (J. A.). On a medallion of Jean Héroard, Court physician of Louis XIII, by G. Dupré. Héroard was born at Montpellier, in 1550 or 1551, and died in 1628. The only other medal of Héroard is signed by Warin, though it is wrongly attributed to Dupré in the *Tresor de Numismatique (Méd. françaises, Part. II., Pl. XIX. 5).*

8. DE LA TOUR (H.). Giovanni Paolo, modeller in wax and medallist at the Court of Henry IV. The three or four octant medals of this artist are reproduced on Plates V. and VI. They represent Anno, Duc de Joyenx, Admiral of France; François Miron, *Lieutenant civil* and *Prévôt des Marchands*, to whom Paris owed the construction of the *façade* of her *Hôtel de Ville*, *ob.* 1609; Catherine de Médecis, in widow's dress and veil, 1589, a powerful portrait, evidently taken from life, but distinctly ugly; and, lastly, St. Charles Borromée, Cardinal and Archbishop of Milan, *ob.* 1584. Giovanni Paolo, an Italian by birth, worked at the French Court side by side with the celebrated medallist Guillaume Dupré.

The *Zeitschrift für Numismatik*, Bd. XIX., Part I., contains the following articles :—

1. BUCHENAU (H.). On the Bremen Find (1887), consisting in the main of fourteenth century, so-called, "Dickpfennige" of Saxony and Westphalia.

2. BAURFELDT (M.). Researches concerning the chronology of the coins of the Domitii Ahenobarbi.

The results of the writer's study of these coins are, briefly, as follows :—(i.) The denarius with CN. DO. (Mommsen-Blacas No. 39) was struck about B.C. 200 by the monetarius Cn. Domitius L.f. I.n., Consul B.C. 192. There are no bronze coins of this series except possibly the As. (ii.) The monetarius of the denarius, Mommsen-Blacas No. 188, was Cn. Domitius Cn.f. Cn.n., Consul 122 B.C. These coins were struck before B.C. 125. To this series belong the bronze coins with CN. DOME. &c., with possibly the exception of the As. (iii.) The denarius (Mommsen-Blacas No. 167) was issued by Cn. Domitius Cn.f. Cn.n. after B.C. 125. To this denarius belongs the second series of bronze coins with various types and the names of the three monetarii Cn. Domi., M. Sila., and Q. Curti. (iv.) The denarius, Mommsen-Blacas No. 170, was struck by the same Domitius, not during his censorship with Crassus, B.C. 92, but previously, B.C. 109-104.

3. BAURFELDT (M.). On re-struck coins of the Roman Republic. The value of re-struck coins is hardly sufficiently appreciated by collectors; and if others who possess re-struck coins, either Greek or Roman, would follow the author's example by making them known, very valuable scientific data

would be furnished for determining more exactly the dates of issue of many series in cases where other evidence is lacking.

In the present article, Herr Bahrfeldt gives examples of Roman Republican coins struck over Roman, Romano-Campanian, Ptolemaic, Sicilian, and Siculo-Punic specimens.

Band XIX., Part II., contains the following articles:—

1. HARTMANN (M.). On copper coins of the Abbasside rulers.
2. STIOKEL (D.). On a very remarkable dinar of the Abbasside Khalif El-Wathik-billah.
3. STÜOKELBERG (E. A.). On the title "Nobilissimus" and "Nobilissima" on Roman coins from the time of Diocletian onwards.
4. BARDT (Fr.). On a find of pennies of Brandenburg of the second half of the thirteenth century, discovered in 1892 at Zwinert (West-Sternberg), consisting of 1,168 pieces and 424 halves.
5. BARDT (Fr.). On the right of coinage of the Bishops of Lebns, in Posen, on the left bank of the Oder.
6. DEXLER (W.). On ancient numismatics. (i.) Apollo Karinos, in Byzantium. The obelisk represented on certain bronze coins of Byzantium is compared with a similar obelisk on coins of Megara, the mother city of Byzantium; and, as on the latter this object has already been identified from Pausanias (I. 44, 2) as symbolical of Apollo Karinos, the writer thinks that it has the same signification at Byzantium. (ii.) Adonis hunting the wild boar on Imperial coins of Aphrodisias. The hunter on these coins has been hitherto called Meleager. Other coins of Aphrodisias, representing various types of the goddess Aphrodite, are also described. (iii.) A coin of Cos, having on the reverse a vase with two doves seated upon it.
7. KINCH (K. F.). On the meaning of the inscription IATON on ancient coins of Himera. The explanation of this word as a Greek rendering of a supposed old Phoenician name of Himera, ΗΑ or Η', is disputed, and the author advances strong arguments in favour of interpreting it as the genitive plural of *iatós*, a verbal adjective formed from the verb *íáopai*. The coins bearing this inscription he, therefore, supposes to have been issued at the baths of Himera, afterwards called Thermae—the earliest "health resort" of which we have any notice—by the visitors to this ancient watering-place restored to health by the baths of the Nymphs, Θερμὰ Νύμφαν, as Pindar calls them. The cock and hen on the coins of Himera he also explains as the thank-offerings of the convalescent. The word ΕΩTHP accompanying the Nymph offering sacrifice on

a didrachm in Dr. Weber's collection (*Num. Chron.*, 1892, Pl. XV. 3) is likewise interpreted as an epithet of the healing Nymph, or presiding health-goddess, of the baths.

8. *Voigt* (H.). On school-medals and counters.

Ἐθνικὸν νομισματικὸν Μουσεῖον ἐν Ἀθήναις. Ἐκθεσις τῶν κατὰ τὸ Ἀκαδημαϊκὸν ἔτος 1891—92 πεπραγμένων ἐπὶ J. N. Svoronos.

From this official report of M. Svoronos, the Keeper of the National Coin-Cabinet at Athens, we learn that within the past two years the collection has been enriched by the enormous number of 36,799 coins, of which 929 are of gold, 7,930 of silver, 1,661 of mixed metal, 25,697 of bronze, 50 of lead, and 532 of various other metals. A very large proportion of these acquisitions are presentations. If the youngest coin-cabinet in Europe continues to increase at this rapid rate, it will not be very long before it outstrips, at any rate in numbers, all the older collections in Europe.

Mélanges Numismatiques. Deuxième série accompagnée de 9 planches. Rollin et Feuardent, 1893.

M. Babelon, the learned and indefatigable Keeper of the Cabinet des Médailles de la Bibliothèque nationale at Paris, has conferred a benefit upon numismatists by republishing, in two handsome volumes, his numerous and invaluable articles which have appeared from time to time in the pages of the *Revue Numismatique* and other periodicals. As I have already noticed most of these papers on the occasion of their first appearance, I need only now call the attention of the readers of the *Numismatic Chronicle* to those among them which are new, or which, owing to the fact that they were originally published in journals not strictly devoted to numismatics, have hitherto escaped notice. In the present volume there are four such papers:—
 (i.) On the large medallions of Bereuice II. After the famous 40-drachm gold medallion of Eucratides, the gold Attic decadrachm of Berenice, here published for the first time, is the largest gold coin ever struck in ancient times. To the same queen belong also the largest silver coins ever issued in antiquity, viz., Attic dodecadrachms, also hitherto unpublished. The writer thinks that the largest Ptolemaic bronze coins probably

belong to the same category, and he appears to be in general very sceptical with regard to the scientific value of the various treatises on the coins of the Ptolemies which have up to the present seen the light. After all the labour which has been expended upon this difficult branch of numismatics it is, to say the least, discouraging to read the following sentence by one of the most experienced numismatists of our time: "Bref, disons le mot: l'étude des monnaies égyptiennes est à reprendre *ab ovo*, et c'est surtout de ceux qui ont traité des différents systèmes monétaires usités dans l'Empire des Lagides et des rapports des métanx monnayés entre eux, en Egypte, que l'on peut dire: *in vanum laboraverunt*."

(ii.) The chronology of the Kings of Citium, an essay on some points in the history of Cyprus under the dominion of the Achæmenidæ. The writer very truly points out that the numismatics of Cyprus afford a striking proof of the inestimable value of coins for the reconstruction of history. Even the elements of the chronology of the kings of Citium were wanting when Engel, fifty years ago, wrote his history of the island. Little by little, however, the discovery of coins and inscriptions has made it possible to construct a chronological list of the kings of Citium, which, though possibly it may still have to be modified in some details, is no doubt approximately correct. The following chronological table gives the result of M. Babelon's researches:—

Unknown king	ob. B.C. 480
Baalmelek I, King of Citium	B.C. 479—449
Interregnum of some months	449
Azbaal, King of Citium and Idalium	449—425
Baalmelek II, King of Citium and Idalium	425—400
Baalram, King of Citium and Idalium	400—392
Melekiathon, King of Citium and Idalium	392—388
Demonicus, King of Citium	388—387
Melekiathon, restored	387—361
Pumiathon, King of Citium, Idalium, and Tamassus	361—312

(iii.) The Demaratides and the Gongylides in Asia Minor under Persian rule. The writer proves that Themistocles, who coined money, after his flight from Greece, at Magnesia on the Maeander, was by no means the only Greek refugee upon whom the great king conferred an estate in Asia Minor, together with its inherent revenues. Among other privileges which these Greek despots, under Persian protection, enjoyed, was that of striking money. The coinage of Themistocles was first recog-

nised by M. Waddington in 1861. M. Babelon now seeks to identify the coins of Teuthrания, in Mysia, *rev. TEY* and young head in Persian tiara (*Hist. Num.*, p. 466), as the money of Procles I, *circ. B.C.* 399, the grandson of Demaratus I, the exiled King of Sparta, who was the founder of the dynasty of Teuthrания, *B.C.* 491, and whose descendants held the principality of Teuthrания down to the invasion of Alexander the Great, *B.C.* 322. Some early coins of Pergamus (*Hist. Num.* p. 459), electrum and silver, having on the reverse a bearded head in a Persian tiara, are attributed by the author to Eurysthenes, another grandson of Demaratus, *circ. B.C.* 399; and lastly, some coins hitherto attributed to the town of Gorgippia, in the Cimmerian Bosporus, having on the *obv.* a head of Apollo, and on the *rev.* ΓΟΡΓΙ and the forepart of a butting bull (*Hist. Num.*, p. 422), M. Babelon ascribes to Gorgion, despot of Gambrium (*circ. B.C.* 399), the son of Gongylus of Eretria, who was exiled from his country *B.C.* 476, and upon whom Xerxes conferred a small inheritance in Asia, comprising the towns of Gambrium, Palægambrium, Grynium, and Myrina.

(iv.) On the coinage of Edessa in Mesopotamia. The history of the city of Edessa, the key of the valleys of the Tigris and the Euphrates, has for nearly two centuries occupied the attention of Orientalists, partly in consequence of the antiquity and originality of its national traditions, and partly because of the numerous Christian convents established there in early times, which made Edessa the chief source of the extant Syriac literature. The present essay is, of course, purely numismatic, and the author describes the coins of Edessa from the time of Mannus VII, *A.D.* 128—189, down to that of Abgarus X, (Phrahates), *A.D.* 242—244. A close study of the coins has enabled M. Babelon to draw up a revised chronological table of the kings of Edessa during this period, which is as follows:—

Mannus VII.	.	.	.	.	A.D. 128—189
Mannus VIII.	.	.	.	.	189—163
Val	.	.	.	.	163—165
Interregnum	.	.	.	.	165—167
Mannus VIII restored	.	.	.	.	167—179
Abgarus VIII alone, and subsequently with his son Mannus	.	.	.	.	179—214
Abgarus IX. (Soverus)	.	.	.	.	214—216
Mannus IX. (nominal king)	.	.	.	.	216—242
Abgarus X. (Phrahates)	.	.	.	.	242—244

(v.) On the Coinage of Thibron. In Photius (*Lex. s. v.*) is the following statement: Θιβρώνειον νόμισμα ἔδοκε ἀπὸ Θιβρώνος

τὸν χαράξαντος εἰρῆσθα. There can be little doubt that the Thibron who issued the money in question was the Spartan general in command of the Greek forces, levied to oppose the Satrap Tissaphernes in Asia Minor in B.C. 400, after the retreat of the Ten Thousand. Mommsen's theory that the Θιβράνειον νόμισμα was the silver stater of Seuthes of Thrace, with the inscription ΣΕΥΩΑ ΑΡΓΥΡΙΟΝ, has indeed little to recommend it, for Thibron was not in command of the remnant of Xenophon's army during the time that it was in the pay of Seuthes. It was not until Thibron had taken up his quarters at Ephesus that his emissaries induced Xenophon's soldiers to pass over into Asia Minor on the promise of giving to each private soldier a daric a month, with proportionate higher pay to the officers. Following these indications, M. Babelon proposes to identify as the Θιβράνειον νόμισμα certain gold staters, half staters, and hecte, reading ΕΦΕΣΙΟΝ (staters) and ΕΦ (drachms and hecte), and having for type, on the obverse a Bee, and on the reverse an incuse square quartered.

If these coins could be accepted as genuine, there is no doubt that M. Babelon would have made out a good case for supposing them to have been issued by Thibron, but he confesses that he has never seen them, and unfortunately for the writer's theory all who have seen them, with the exception of Mr. Borrell, the original possessor of the specimens in question, and of Mr. Whittall, who thought he once had a genuine specimen, all who have seen them have condemned them as forgeries. At any rate, the gold stater, formerly in the collection of Mr. Thomas Jones, of which there is an electrotype in the British Museum, is unmistakably false. Whether a genuine specimen, of which this may possibly be a copy, exists, or ever existed, remains to be proved, and until M. Babelon is able to satisfy numismatists as to the authenticity of the coins upon which he bases his arguments, I, for one, must hesitate to accept his conclusions.

BARCLAY V. HEAD.

J. N. Svoronos. Τύποι ἀναφερόμενοι εἰς τὴν ἐν Κρήτῃ παιδοτροφίαν τοῦ Διός.

In this interesting paper (reprinted from the *Ephemeris archaiologike*, 1893) M. Svoronos brings together a number of Cretan coin-types, which he proposes to interpret as relating to the nurture of the infant Zeus in Crete. Greek legend especially pointed to Crete as the birth-place of the

god. According to Hesiod, Rhea gave birth to Zeus at Lyttus, and then concealed him in a deep cave. The Idæan cave and a cave of Dicte were also regarded by some as the scene of the nativity. The infant god was not only nourished by the milk of the goat Amaltheia, but (as the author reminds us) the eagle, the bee, and the dove also assisted in his nurture. M. Svoronos is of opinion that the eagle on the coins of Lyttus, Cnossus, &c., the bee at Elyrus, Aptera, &c., the dove at Aptera, Praesus, &c., and the goat on several other Cretan coins all relate to legends of the infancy of Zeus. This explanation of the bee-type had already been proposed in my essay on *Cretan Coins* (*Num. Chron.*, 1884, pp. 32, 88), and I am glad to find it supported by M. Svoronos. The explanation of the dove also seems probable. The eagle is unquestionably a symbol of Zeus, but there is nothing to show that it specially relates to the stories of his infancy. I cannot accept the view that the goat on Cretan coins relates to Zeus, and I have already tried to show (*Cretan Coins*, pp. 28—82; and *Catal. Crete and Aegean Islands*, p. xxvi. f.) that the numismatic evidence (which M. Svoronos does not here discuss) is all in favour of connecting this animal with Apollo, who was probably regarded in the island as a patron of hunters.

A considerable portion of the article is devoted to the discussion of the coins of Cydonia that represent an infant suckled by a hound, and to a coin of Praesus (first described by M. Bahelon in the *Revue Numismatique*, 1885, p. 161), which shows an infant suckled by a cow. M. Svoronos contends that in each case the child is the infant Zeus. The literary sources make no positive mention of the legends here supposed to be portrayed, but M. Svoronos is able to cite a passage from Athenaeus, ix. 376a, in which it is stated that before a marriage the people of Praesus performed sacrifices to a sow, an animal that was considered sacred because it suckled the infant Zeus after his birth on Mount Dicte (cf. the head of a boar or sow on coins of Lyttus). The reference of the cow and infant type at Praesus to Zeus seems probable, though M. Svoronos's arguments do not, to me at least, seem quite convincing. The Cydonian coin-type—an infant suckled by a hound—was supposed by me (*Cretan Coins*, p. 26) to relate to the infancy of Cydon, the hero of the Cydonians. Cydon was grandson of Minos and son of Acacallis, a lady who may have exposed him in infancy as she did her other child Miletus. Miletus (according to Antoninus Liberalis) was suckled by a wolf, and a hound may have performed the same kindly office for Cydon. A further reason for connecting this type with Cydon is the

appearance of a dog in the company of the archer represented on other coins of Cydonia. This archer is usually supposed to be Cydon himself: in any case, however, he is not Zeus. I cannot think, therefore, that M. Svoronos has completely disposed of the "Cydon" theory, though his argument in favour of Zeus is extremely learned and ingenious and may commend itself to many of his readers as the correct explanation.

WARWICK WROTH.

An Introduction to the Copper Coins of Modern Europe. By FRANK C. HIGGINS. (Sonnenchein & Co.)

This handbook of under a hundred pages, which forms a part of "The Young Collector's Series," published by Messrs. Sonnenchein & Co., deals with the copper coinages of Europe, exclusive of those of the British Isles, which had already been treated of in two preceding volumes of the series. The work before us begins with rather a full account of the copper coinages of France, followed by those of Spain, Germany, Scandinavia, Italy, Netherlands, Russia, &c. In this arrangement there is no particular historical or geographical order. To bring the book within so small a compass, the author was compelled to curtail the descriptions of the types of the coins, and, in many instances, to limit himself to simple identifications of the denominations. This is specially noticeable in the case of the numerous coinages of the petty states of Germany. In itself this series of coins is of no very special interest. It lacks any artistic merit, and, as the issues of copper coinages are from earliest times very irregular, it affords but few historical data. The chief recommendation to the young collector seems to be, as Mr. Higgins suggests in his introduction, that a collection can be formed at a comparatively small expense. In spite of this want of interest there are, however, no small number of collectors to whom this handbook will be a boon, as besides being of assistance in the classification of their coins it supplies dates of ruling sovereigns, petty princes, &c., many of whom are not mentioned in the ordinary biographical dictionaries. In the main Mr. Higgins's descriptions of the coins are accurate and reliable; but some difference of opinion may exist among numismatists as to some of his theories, viz. as to the origin of the word *pecuniary*, the relations of the Greek and Roman copper coinages, the circulation and date of the German *bractiates*, &c.

H. A. GRUEBER.

MISCELLANEA.

RYAL OF HENRY VII.—This coin is so rare that it may be worth while to record the fact that a good specimen was recently bought, with one or two common angels and crowns of Henry VIII. (these latter in poor condition) by my brother-in-law, Mr. G. Lawson, C.B., among the odds and ends of a sale of old furniture at Plymouth. Evidently both the auctioneer and his clients were totally ignorant of numismatics, and had no notion of the value of the coin with which they were dealing. The description in the catalogue, which was quite sufficiently plain, was taken from that written on the piece of paper in which apparently for many years it had been wrapped.

A comparison of the coin with that in the British Museum has removed, I think, any doubts as to its genuineness. Their general state is much the same; and their correspondence in minute details shows that they have both been struck from the same dies; the Museum specimen, however, was struck first, as this other one shows a crack in the corner of the die on the obverse. There is a difference also of about a grain in the weight, $117\frac{1}{2}$ grs. compared with $118\frac{1}{4}$, that of the Museum one.

Besides these two, I am only aware of the existence of three other specimens of this Ryal; viz. one in the Fitzwilliam Museum at Cambridge, another in the collection of Mr. Rashleigh, and a third in the Bibliothèque Nationale at Paris.

A. E. PACKE.

XVII.

THE INITIAL COINAGE OF ATHENS, &c.

(Letter to Mr. Barclay V. Head, D.C.L., Ph.D.,
Keeper of Coins, British Museum.)

MY DEAR HEAD,—I am obliged to you for your very courteous reply to my note. Controversy on these terms is very pleasant and may be profitable. Nor can it involve any heart-burning to differ in these difficult issues, when it is often a balance of probabilities rather than a definite conclusion which is alone attainable. In your answer you do not refer to two of the points upon which I chiefly rely. The first is that we have a positive and direct statement which cannot, it seems to me, be evaded, that the types of the Athenian coins were changed by Hippias. This statement cannot mean that the head of Athena was changed in such a slight degree that it requires a trained numismatist to notice it. It assuredly must mean that the types of the coins were changed substantially. There was every reason why the Pisistratidæ, who were especially devoted to the cult of Athena, under whose *ægis* they returned to Athens, and whose great shrine they apparently rebuilt, should have signified this devotion by altering the coins. We have therefore a positive statement on the subject as well as a plausible

explanation of the change, and every reason to conclude that such a change actually took place at Athens.

At Eretria, on the other hand, we have no such statement, and, so far as we know, no reason of any kind why the types should have been altered.

Secondly, the occurrence of the Gorgonion on the coins of Neapolis, one of which bears an alpha, assuredly can mean nothing else than that this colony of Athens adopted the type of its mother city, as was the case in so many other places. Why should it adopt the Gorgoneion if that symbol was the mark of Eretria? Pisistratus himself, so far as we can make out, founded Neapolis when he took a colony to the banks of the Strymon and worked the gold-mines which afterwards enriched his family so much. It is very natural that this powerful exile from Athens, who had determined to return home and claim his own as soon as he could, should have put the symbol of the city, of which he claimed to be the legitimate ruler, on the coins of the colony he had founded. There are reasons for believing that when Pisistratus founded his colony he also displaced the influence of Thasos in the district. It would further seem that he acquired authority over Thasos itself, which would explain the occurrence of an alpha on at least one of the earliest Thasian coins. The evidence of the coins of Neapolis you have not referred to in your reply.

One of the chief points which you make is in reference to two obols, on one of which there is a bucranium on one side and an octopus on the other; while on the second one there is similarly a Gorgoneion and the hinder half of a horse's body. These coins were of course known to me when I wrote, and it was by inadvertence I omitted to notice them. They in fact were considered by

myself as substantiating my position rather than as presenting any difficulty.

It seems to me quite plain that both coins represent an alliance between two states or two cities, and that in neither case can we attribute the symbols on both the obverse and reverse to the same community. They are, it seems to me, to be compared with the well-known joint coins of Croton and Sybaris, and of Samos, Cyrene, and Rhodes, which Mr. Wroth kindly looked out for me at the Museum. It seems to me that we must accept this explanation, unless we are to make the hinder part of the horse also a symbol of Eretrian coins, instead of being the symbol of the coins of Cyme, as it seems to me you and others have shown it to be. I consequently take the coin with the bucranium on one side and the octopus on the other as evidencing some alliance in early times between Phocis and Eretria, as I take the other coin to evidence an alliance between Athens and Cyme, a very probable event to have happened in the time of Pisistratus, who, we know, had Euboeans among his allies.

In regard to the question of the style of the coins, this opens a wide and a difficult issue. I hold, and have long held, that Greek art of the sculptured and glyptic kind, in which the human body was introduced, was largely the consequence of direct Greek contact with Egypt at Naucratis. It is from this time we must date the primitive so-called Apollo statues, which initiate Greek sculpture, and which in pose and other respects are mere echoes of the statues of Psammetichus the First, notably of such a statue as the one in dark basalt preserved in the Louvre.

We have, it seems to me, dated the renaissance of Greek glyptic and sculptured art too early. If we

examine the head detached from one of the Didymean seated statues, which statues we can approximately date from the form of the letters with which one of them is inscribed, or the heads from statues found at Ephesus by Mr. Wood, which doubtless belonged to the temple built in the reign of Crœsus, we shall have a measure of the standard reached by sculptors at this time in the wealthiest part of Greece. I can see no reason whatever for supposing that the rudest heads of Athena on the coins, all of which are of the so-called Egyptian style, are earlier than the time of Hippias, and the very fact of these same coins having no incuse on the reverse but a stamped type both on the obverse and reverse, seems to me to point to their comparatively late date when compared with the coins with the Gorgon's head, &c.

In regard to the weights, your own concessions seem to me to show that the question is very doubtful and difficult, and by no means clear. In this behalf I cannot see how the didrachm with the bucranium (*Cat. Cent. Gr.* Pl. XXII., 5) is to be left out of the argument. If it be of Phocis, as on other grounds it seems to be, then you must account in some way for its weight, and my theory does this.

I would therefore respectfully urge again that the didrachm with the bucranium belongs to Phocis; that the two coins with double types, which you rely upon in your reply, are alliance coins, and that before the time of Hippias, during the domination of Solon and Pisistratus, the coinage of Athens had a Gorgon's head, representing Athena, on one side, and a simple incuse, or an incuse containing a facing lion's head, probably connected with Theseus, on the other; and that the long and famous series, with Athena on one side and the owl on the other, were

initiated by Hippias, and constituted one of his principal and most lasting reforms.

When we come to class the earlier coins with Athena's head on one side and the owl on the other, I am bound to say that I feel some hesitation in putting aside palaeographical considerations in favour of purely artistic ones, when we have to decide among coins, all of which are primitive and rude, and which, if my view be correct, were struck, in some cases, in very troublous times, namely, those connected with the expulsion of Hippias. I would therefore suggest, with every deference for your superior experience, that the Athenian coins with the Θ form of the Theta should all be placed before those with the generally later form Θ . As you yourself suggest, one of the former coins which you figure on Pl. II. fig. 7 of your *Coins of Athens*, is very like in fabric to the rude coins figured as of Eretria in the *Catalogue of the Coins of Central Greece*, Pl. XXII. 6. I would transpose, therefore, certain coins in your Plates I. and II. of the *Coins of Attica*, and place those numbered 5, 6, and 7, Pl. II., at the head of the list of this class of coin, and assign them to the time of Hippias, and the other coins on Plates I. and II. to the period ranging from the confusion which followed his expulsion, down to, say, 480 B.C. Another mark of archaism in the coin on Pl. II. fig. 7, is the absence of the olive-twigs.

I see that in your *Catalogue of the Coins of Attica* you imply that Pisistratus lived for some time at Eretria. I can find no evidence of this. He no doubt landed on the island of Eubœa, and secured the alliance of the Eretrian knights on his return from the Strymon, but I can find no evidence that he ever lived at Eretria.

May I in conclusion say a word on another subject? I

have become exceedingly sceptical about the date generally assigned to Pheidon and his coinage. As you have well said in your *Historia Numorum*, there are great discrepancies in the statements of the authorities on this subject, most of which are very late. I confess to having great *a priori* prejudices in favour of any statement of Herodotus about primitive Greece. Now Herodotus distinctly says, in chapter cxxvii. of book vi., that Leocedes, the son of Pheidon, the king of the Argives, who established weights and measures throughout the Peloponnesos (and who, according to the Parian marble, &c., is the same person who introduced a silver coinage into Ægina), was a contemporary of Cleisthenes, of Sicyon. Cleisthenes won the chariot race at the second Pythian festival in B.C. 582. (Pausanias, x. vii. § 3.) Müller and Rawlinson have agreed that the passage in which this statement occurs is sound and not corrupt, but that Herodotus himself made some mistake. I venture to think that he is amply supported, as you in fact suggest on page lxiv of the introduction to the *Coins of Attica*, by the numismatic evidence and by the style of the early Æginetan coins, and that the confused chronology is not that of Herodotus, but of the later writers. It would be valuable and interesting to have your opinion in greater detail on this subject, which is so important in discussing the initiation of a silver coinage in Greece.

Yours very truly,

HENRY H. HOWORTH.

ATHENÆUM CLUB,

October 23rd, 1893.

XVIII.

THE INITIAL COINAGE OF ATHENS, &c.

(Reply to Letter of Sir Henry Howorth, K.C.I.E., M.P.,
F.R.S., F.S.A.)

MY DEAR HOWORTH,—Your reply to my letter to you in the last number of the *Chronicle* calls for a few additional remarks on my part, which I will try to make as concise as possible.

In the first place, you boldly assert “*that we have a positive and direct statement, which cannot be evaded, that the types of the Athenian coins were changed by Hippias.*”

Now this seems to me to be an assumption which is far from being warranted by the passage in the Pseudo-Aristotelian second book of the *Æconomics* (ii. 4) to which you refer. Let us see exactly what this “*positive and direct*” statement amounts to. In the first place, it is important to bear in mind that the context shows that the writer is enumerating the various financial tricks and frauds to which Hippias had recourse for the purpose of raising money. Among other expedients of this doubtful character is the following:—“Hippias,” he says, “*τό τε νόμισμα τὸ ὅν Ἀθηναίοις ἀδόκιμον ἐποιήσε, τάξας δὲ τιμὴν, ἐκέλευσε πρὸς αὐτὸν ἀνακομίζειν συνελθόντιν δὲ ἐπὶ τῷ κόψαι ἔτερον χαρακτῆρα, ἐξέδωκε τὸ αὐτὸ ἀργύριον.*” That is to say that Hippias demonetized the

existing currency; called it in at a fixed valuation ($\tauιμή$) (doubtless on the ground that the coins had become deteriorated in value by long circulation); and that after a meeting ($συνελθόντων$) of some sort for the purpose of striking coins with a different type, he *reissued the same coin*.

The writer, far from stating that Hippias carried out his project of issuing a new coinage of a different type, expressly asserts the exact opposite when he says that $ἐξέσωκε τὸ αὐτὸ ἀργύριον$. Justly or unjustly, Hippias is here accused categorically of having had recourse to a paltry trick for raising funds, of which he was well known to be in dire need at the time. He therefore, according to the writer, called in the worn coins at metal value, on the plea of the necessity, for a new coinage of full weight, and then, pocketing the difference, he reissued the old coins ($τὸ αὐτὸ ἀργύριον$) instead of the promised new ones of a different type and of full weight.

This is clearly the accusation brought against Hippias by the author of the *Economics*, and doubtless the imputation was widely circulated at the time by his opponents, to the detriment of his reputation for honest dealing.

For my own part I accept Grote's verdict, that little reliance is to be placed on the statements in this treatise respecting persons of early date, such as Kypselos or Hippias, and I am inclined to think that this accusation may have been altogether unfounded, though I can well believe that it obtained some credence both at the time and in later days.

The citizens of Athens, it may be presumed, after parting with their old coins, expected to see on the promised new money something entirely different ($ἔτερον$)

χαρακτήρα) from that to which they had, since Solon's time, been accustomed; and when the new money was paid out to them by Hippias, it is quite conceivable that the bulk of the populace may have failed to distinguish the new type of the head of their national goddess from that on the old coins, notwithstanding the fact that, to the eye of a numismatist, the improvement in the artistic treatment of the head of Athena is salient and unmistakable. Hence many people may have been only too ready to give credence to the charge of embezzlement implied in the passage of the *Economics*, to which you attach a meaning that, as I think, cannot by any fair means be extracted from it.

The direct opposition between *ἔτερος χαρακτήρα* and *τὸ αὐτὸ ἀργύριον* is too remarkable to be slurred over. It seems to me, therefore, that the passage in question, in so far as it is worthy of credit, shows most clearly that no *essential* change in the characteristic types of the Athenian coinage can have been effected on this occasion by Hippias, when he called in and reissued the coinage. If any change in type was really made at this time, it can certainly only have been such a modification and improvement of the previously existing type as I suppose it to have been, and one which escaped the notice of some at least of the citizens of Athens, and which gave rise to the calumny propagated by the author of the *Economics*.

To your proposal to bring down the primitive bullet-shaped Athenian coins to the time of Hippias, there is another, as I consider, fatal objection. We must, as you yourself imply, allow the space of, probably at the very least, half a century for the duration of this primitive coinage, of which the dies are extremely numerous and varied, evidently ranging over a long period. This

fact, on your hypothesis, brings us down to about the year B.C. 477, in other words, to the resurrection of Athens, and the rise of her empire after the Persian wars, for the commencement of the new coinage, characterized by the olive-leaves on the helmet of the goddess, the series which I believe to have begun under Hippias.

At this late date such an archaic type of the head of Athena as we meet with on the coins of this second series could never have been adopted for the first time. On such an important occasion as a reform of the coinage (had a reform taken place just at this particular time, when the arts were rapidly emancipating themselves from the trammels of hieratic archaism), there can be no doubt that Athens, like every other Greek city which began to coin or changed the types of its coinage after B.C. 480, would have employed the ablest artists of the period to engrave the dies of the new money, and the head of Athena would have been brought into harmony with the taste of the age.

That no such change of type took place at Athens after the Persian war is, no doubt, a remarkable fact, but it is one which it is not difficult to account for. The conservative instincts of the trader and the banker were strong enough to insure the continuance of the archaic coinage of Athens (widely renowned as it must have been throughout the ancient world), even down to the time of the Peloponnesian war. (*Cf. Cat. Attica*, Plates IV. and V.)

As you have alluded to Naucratis and to the remarkable influence which Egypt, through this channel, exercised upon Greek art, owing to the direct contact at that emporium of Greeks and Egyptians, it may be worth while

to inquire whether the Athenian coins found on the site of that city furnish us with any chronological indication of the period to which they belong. Professor Petrie (*Naucratis*, Pt. I. p. 8) remarks that "Naucratis during the reign of Amasis (B.C. 572—527) flourished on its monopoly of Greek trade. The Persian invasion, however, told seriously on the prosperity of the city. This is curiously evident in the proportion of pottery which I have found there. In a perfectly impartial collection of pottery of all periods found in the town there is fifty or a hundred times as much belonging to the century, or century and a half, before the Persian invasion, as to the century and a half of the Persian dynasty."

Now if we apply some such criterion as this to the coins of Athens also found at Naucratis, we note that, of the 86 tetradrachms discovered there, 1 worn specimen belongs to the primitive class, 73 to the fine archaic class, which I would assign to the age of the Peisistratidæ, and 12 only to a later date.

These numbers confirm the principle established in the case of the pottery. An overwhelming majority of the specimens belong to the flourishing period of Naucratis before the Persian wars, and are of the refined archaic type, with the olive-leaves on the helmet of the goddess; a type which may possibly have been, to some extent, influenced by Egyptian art.

The origin of this type cannot, I think, reasonably be brought down later than the time of Hippias (*circ. B.C. 527*). If we accept this date, it throws back the primitive rude, and in many cases even barbaric, class into a previous period which may easily extend up to Solon's time, *circ. B.C. 594*, when, as I think, the coinage of Athens originated.

Next, with regard to the coinage of Eretria, you seem to attach great importance to the fact that we know of no reason why the types of the coinage should have been changed. For my own part I cannot see that this change of type is particularly surprising or unusual. Similar radical changes of type might be pointed out at many other cities, the reasons for which we are equally unacquainted with.

The question of the derivation of the Gorgoneion type at Neapolis Datenon is dealt with in an interesting communication from my colleague, Mr. Hill. To this point, therefore, I need not refer, except to express my concurrence with his views.

As to any alliance coinage between the Eubœan city of Eretria and Phocis, which is separated from it by the intervening territory of Bœotia, I can only say that such an explanation of the combination on a single obol of the bull's head and octopus seems to me to be in the highest degree improbable. I am willing to admit the possibility of occasional (though very rare) alliance coinages between neighbouring friendly cities in Eubœa itself, or even between Eubœa and Athens or Bœotia ; and of course of such great monetary unions as that of the ancient cities of Magna Græcia, which you cite. But, in such cases, the alliance types are found on the larger coins, whose circulation was not restricted to the localities in which they were issued. No two distant states, temporarily joined in alliance, would be likely to confine the alliance type merely to such small change as the obol, which can only have had a limited and local currency. The bull's head, moreover, is a type singularly appropriate to Eubœa, notwithstanding the fact that it is also characteristic of the coinage of Phocis. As to the didrachm with the

bull's head, which is of the Euboic standard (Cat. *Cent. Gr.*, Pl. XXII. 5), I think that, unless you can prove beyond all doubt that the Euboic standard prevailed in Phocis, the attribution to Eubœa must hold good.

With reference to the sequence of types in the series of the primitive Athenian coins, I have already pointed out, in my Introduction to the *Catalogue of the Coins of Attica*, p. xvi., that no inference as to precedence can be drawn from the two forms of the letter theta (Θ and Φ). Both forms occur in Attic inscriptions before the time of Hippias, and Φ is occasionally met with as late as the middle of the fifth century. The chronological sequence of the various types of primitive Athenian coins can only, therefore, be a matter for conjecture, dependent entirely upon style and fabric.

The presence or absence of a clearly defined incuse square is also no trustworthy indication of date in this period, although it would seem that, as a general rule, the incuse square is more sharply defined and more conspicuous on the later than on the earlier coins, if we may draw this inference from the fact that on the reformed coinage characterized by the olive-leaves on the helmet of Athena, the incuse square is much more deeply struck than on most of the specimens of the rudest and most primitive class. Compare, for instance, the decadrachms and tetradrachms, Cat. *Attica*, Pl. III. Nos. 1—5, with the tetradrachms on Pl. I. Nos. 3—7.

Again, the fact that the earliest Athenian coins have types on both sides is, as I have already shown (Cat. *Attica*, Introd., p. xvii.), no proof whatever that they are not to be classed among the earliest silver coins struck in European Greece.

The much-disputed question of the date of Pheidon, which you touch upon at the end of your letter, is one which it would be presumptuous in me to discuss. Whether the passage in Herodotus (vi. 127) is corrupt or obscure, or whether the historian is merely relating a popular tale, scholars versed in such inquiries must decide among them. In so far only as numismatic evidence may be of some weight, as contributing towards a settlement of this vexed question, can I venture to express an opinion, and this I have already done in my *Historia Numorum*, p. 331, where I have assigned the earliest Aeginetan staters of the Tortoise type to the first half of the seventh century B.C.

I trust that you will not think that I have expressed myself too dogmatically in thus combating the opinions which you have so ably put forward in your last letter.

In spite of all our differences on these obscure questions, we are both of us agreed on the one main point, which is to elicit the truth.

Yours very truly,

BARCLAY V. HEAD.

BRITISH MUSEUM,
November, 1893.

XIX.

NEAPOLIS DATENON.

(Letter to Mr. Barclay V. Head, D.C.L., Ph.D., Keeper of Coins, British Museum.)

DEAR MR. HEAD,—In his letter on “Coins recently attributed to Eretria,” addressed to you in the last issue of the *Numismatic Chronicle*, Sir Henry Howorth draws, from the coins of Neapolis in the Strymonian region, what he thinks a nearly conclusive confirmation of his theory that the type of the Athenian money before the time of Hippias was the Gorgoneion. As in your reply you seem to have passed over this argument, I think it may perhaps be worth while to point out that it is unsound, and that the facts, if anything, are rather in favour of your own view.

In the first place, the “new Aristotle” does not say that Peisistratus founded a colony near the Strymon. His words are (c. 15, ed. Sandys):—καὶ πρῶτον μὲν συνώκισε περὶ τὸν Θερμαῖον κόλπον χωρίον ὃ καλεῖται ‘Ραικηλος, ἐκεῖθεν δὲ παρῆλθεν εἰς τοὺς περὶ Πάγγαιον τόπους, ὅθεν χρηματισάμενος καὶ στρατιώτας μισθωσάμενος, ἐλθὼν εἰς Ἐρέτριαν ἐνδεκάτῳ πάλιν ἔτει τό(τε) πρῶτον ἀνασώσασθαι βίᾳ τὴν ἀρχὴν ἐπεχείρει, συμπροθυμουμένων

αὐτῷ πολλῶν μὲν καὶ ἄλλων, μάλιστα δὲ Θηβαίων καὶ Λυγδάμιος τοῦ Ναξίου, ἔτι δὲ τῶν ἵππέων τῶν ἔχοντων ἐν Ἐρετρίᾳ τὴν πολιτείαν. The importance of the latter part of this passage will be seen later on; but, to take the facts in the writer's own order, we may notice, first, that nothing is said of a colony near the Strymon. Rhaecelus is on the Thermaic Gulf, at least fifty miles from the mouth of the Strymon, and sixty or seventy from Neapolis Datelon. It is identified with the town later known as Aeneia. It was only after founding the colony at Rhaecelus that Peisistratus passed on to the neighbourhood of the Strymon. But there is no direct evidence that he founded a colony there. Had Grote had this passage before him when he wrote the words cited by Sandys in his note on *τοὺς περὶ Πάγγαιον τόπους*, he would (as, in spite of the opinion of Sandys, I am inclined to think) have gone further, and said, "If Peisistratus had established any settlement at the mouth of the Strymon, the author of the *Αθηναίων Πολιτεία* would certainly have mentioned it *after his explicit reference to the similar foundation at Rhaecelus.*"

Yet, granting that Peisistratus founded this colony, he was at the time an exile from Athens. Now, among the most important of his friends during this period of exile were the knights of Eretria. From the passage I have quoted it appears that it was with the help of these, and actually from Eretria itself, that Peisistratus eventually returned to Athens. I think we are also justified in supposing that Eretria would be the first place visited by Peisistratus when expelled from Athens. Is it not then extremely probable that if Peisistratus founded Neapolis, the majority of those who were with him at the time would have been Eretrians rather than Athenians?

And if so, the earliest type of the coins of Neapolis would be more probably of Eubœan than of Athenian origin. Neapolis could none the less have been called an Athenian colony, as founded by Peisistratus.

If the earliest coins of Aeneia, which, as I have said, was identical with the place colonised by Peisistratus, showed the type of the Gorgon's head, there would be more ground for Sir Henry Howorth's conclusion. But the type, of course, is the head of Aeneas.

One other point was adduced, which will also hardly bear examination. It is surely most improbable that the single letter **A** (occurring, it should be remembered, on only one coin of Neapolis, and that not of the earliest period) can refer to a connection with Athens. We should at least have expected **AΘΕ**. No one who was not *θέσιν διαφυλάττων* would suppose that **A** referred to Athens. But, more than this, this same letter occurs on contemporary coins of Thasos, and the fact that **Ξ** is also found on at least one coin of that series shows that the letter is variable. Neapolis Datenon was either the same town as, or closely connected with Datum, a former dependency of Thasos; and it would therefore seem that the peculiar **A** on the coin of Neapolis has the same significance as the letters on the contemporary coins of Thasos. The letters **NEOP** first occur on coins of the period *circa* B.C. 411—350; and I would suggest incidentally that the earlier coins with the Gorgoneion, exactly similar in fabric to the earlier coins of Thasos, must be attributed to the town under the name of Datum; that is to say, that the place did not receive the name of Neapolis until the time of the Delian Confederacy, when the Athenians turned their attention to colonising and raising tribute from the neighbourhood of the Strymon.

I think that you will agree with me that it is clear that Neapolis does not help in the attribution of the Gorgoneion type to Athens. That the Gorgoneion at Neapolis is actually of Eubœan origin cannot, perhaps, be definitely proved; it may possibly have originated independently; but at least it would seem that while there is some evidence for the Eretrian source, there is none for the Athenian.

Yours very truly,

G. F. HILL.

BRITISH MUSEUM,

November, 1893.

XX.

SOME EARLY GOLD COINS STRUCK IN BRITAIN.



1.



2.



3.



4.



THE earliest coinage of the Teutonic nations, which grew out of the decaying Roman Empire, has exercised many inquirers, and has, in recent years, been illustrated with learning and skill by Mr. Keary, Mr. Grueber, and others. I have no pretence to measure myself, on a question of pure numismatics, against my friends whom I have just named, nor to claim to see further than they have seen, but they will pardon my intrusion into a special field, on the ground that sometimes a poacher can catch a hare when the keeper can find none, and this because he is a poacher.

In some papers I wrote many years ago in the Journal of the Anthropological Institute, which have not, I grieve to say, been as much consulted or quoted as I naturally think they deserve to be, I ventured at considerable length to press the conclusion that in regard to the bulk of the Teutonic tribes who formed the states of modern Europe, they invaded the Empire not as conquerors, but distinctly as invited guests, settling in the frontier districts as mercenaries under their own chiefs, retaining their own customs and living side by side with the Roman colonial population on peaceful terms, and in some cases being buried in the same graveyards. I shall not now enlarge upon a conclusion to which I have devoted much space and a good deal of pains elsewhere, but merely say that I appeal to what I have elsewhere said to justify my now starting with the conclusion as a postulate.

Secondly, I ventured, in my papers on the settlement of the English race in Britain, absolutely to discard a good deal of the earlier part of the Anglo-Saxon Chronicle, down to the conversion of the English to Christianity, as a fable, or if not a fable, as a story transferred from other peoples. The Littus Saxonum, both in Britain and Gaul, I believe, for many reasons, was not the coast molested by the attacks of the Saxons, but as Lappenberg, Kemble, and others have argued, the coast settled by the Saxons, which indeed began to be settled in the fourth century, long before the reported invasion of Hengst and Horsa; and the Lathes of Kent represent the settlements of the Litæ, or mercenary troops, who, from the time of the Emperor Carausius, were a notable feature in our country, and who were employed in the Roman armies elsewhere. These Saxons, as I have said, possibly lived

immediately under their own chiefs, but they were no doubt faithful subjects of the later Emperors.

The story, as contained in the Anglo-Saxon Chronicle, about the settlements of these Saxons on our coasts, is quite artificial and fabulous. The South Saxons are said to have invaded the country in three ships, the same legend which is told of Hengst and Horsa, of the Ostrogoths, Visigoths, and Gepidae, and of the Langobards. Aelle, the reputed name of their chief, is an Anglian, not a Saxon, name. It is remarkable, as Lappenberg has said, that he is the only one of the founders of the Saxon kingdom whose name is not given. His three sons are called Cymen, Wlencing, and Cissa. Mr. Earle and others have pointed out that these names are quite fanciful, and constructed out of the names of three Sussex townships. Cissa, from Chichester, or Cissbiory; Wlencing, from Lancing; and Cymen, from Cymenesore, in Selsey, now Keynor. It is curious that in the Saga the capital of the South Saxons should have been called after Cissa, and not after his father Aelle. The names of the latter's three sons are not given by Bede, nor by the Welsh annalists, and were, no doubt, artificial names constructed from geographical sites. Again, the second elements in two of the geographical names, *oru* and *ceaster*, are Latin. It was not the custom of the Teutonic invaders to construct mongrel names of this kind, nor to plant their settlements actually in Roman towns. The only event mentioned in the Chronicle about these particular invaders, was the capture of Anderida, which they are said to have taken in the year 491, and killed all the Britons; but Anderida was a town of the Littus Saxonum, with a Teutonic name, and colonised by the invaders long before. We may take it, therefore, that the whole account in the Chronicle of the foundation

of the community of the South Saxons is a fable. Referring to the monograph already quoted for other arguments and details, let us now turn to the West Saxons. There the fabulous character of the narrative is still more patent. I had a polemic on the subject with Mr. Freeman, and if I did not convince him that I was right, which I believe I did, I had the singular good fortune to silence him. If we turn to the names of the early kings of the West Saxons, we shall find that they are not Teutonic at all, but Welsh. Cerdic is not a Teutonic name, but a form of the Welsh Caradoc or Ceredig, as Palgrave long ago said. Cerdic is not named as a chief of the invaders either by Bede or the Welsh writers. Cerdic is said to have landed at Cerdicesvora (another bastard name most improbable as a Teutonic gloss) in 495 with his son Kynric. The statement of the landing is again repeated in 514, that is nineteen years after the previous landing, and they still found Britons to oppose them. In 508 they are said to have attacked the British prince Natanleod, a name constructed from Netley (Neatanleah). In 501 *Port* is said to have landed at *Portsmouth*, which was no doubt the *Portus* of the Romans, and received its name long before. In 534 *Wihtgar* is said to have invaded and conquered *Wiht*, i.e. the Isle of Wight, the *Vectis* of the Romans. Port's two sons, Bieda and Mægla, bear names which have a Celtic and not a Teutonic look.

But to turn to Cerdic and his family; he is said to have been the son of Elesa, who was the son of Esla, who was the son of Giwis. These names are not Teutonic but Welsh. Helised is named as a king of Wales by the pseudo-Asser, and Heli is the name of a British king in Geoffrey of Monmouth. In regard to Gewis or Gewessa, the *British* princes claimed descent from a princess so

called ; and it is curious that the West Saxon realm was called *Guioys*, or *Gegwis*, by the British (see pseudo-*Asser* in *Mon. Hist. Britt.* 468, and the *Annales Cambriæ*, sub anno 90) : “ *Albirt (i.e. Alfred) rex Guiyoys moritur* ;” and *Bede* says the West Saxons were formerly called *Gewissi*. If this be the case with his ancestors, what of Cerdic’s descendants ? Cerdic’s son and successor, Kynric, bears a Welsh name—a name borne by several Welsh kings. He was succeeded by Ceaulin, or Ceawlin, which, again, is no Teutonic name ; nor is Cutha, who fought with him against Aethelbyht of Kent in 568 ; and so I might continue down to Ceadwalla (which is merely the Welsh name *Cadwalladar*) and his brother *Mul*. The burden of my remarks is that the story of the origin of the West Saxon line of kings will have to be retold, and it is clear that as it stands in the Anglo-Saxon Chronicle it needs a new interpretation. Either the whole story is fabulous, or, as I am much disposed to think, a native Romano-British line of princes ruled over the district which was peopled by the *Gewissi*, just as the Arthurian line lived in North Britain. The statement in the Parker MS. of the Chronicle in the year 855, when the genealogy of Egbert is given, reads to me very suspiciously. His ancestors bear quite a different set of names from those of the older West Saxon kings, and all have a true Teutonic and Saxon ring about them. They are traced back to *Ingild*, about whom we have the phrase, “ and he was the brother of *Ina*, the West Saxon King.” This seems to me to be distinctly an artificial break, and to be an attempt to hook on the later line of West Saxon kings to the earlier one. However this be, we cannot treat this earlier line in the way in which it is treated in Mr. Green’s history, for instance ; where I cannot help feeling it is rather a disgrace that the

fabulous, or semi-fabulous story, should be widely repeated and imposed upon English students, notably schoolboys, so many years after its fallacy has been exposed.

Having displaced the Anglo-Saxon Chronicle and its statements about the beginnings of the West Saxons, we can now turn to the immediate object of this paper, which is to make an attempt to explain certain coins which are generally placed at the head of the Anglo-Saxon series of Wessex. These coins are very rare, and are for the most part in gold. They are in fact copies of Roman trientes. Of the earliest type of these coins, there are five in the British Museum, four of them in gold and one in silver. On the obverse is a rude diademmed bust turned to the right. On the reverse, as Mr. Keary and Mr. Grueber describe in their catalogue, is an imitation of the reverses of the coins of Magnus Maximus struck in London, or of those of Valentinian struck at Treves, of the same type (see fig. 1). These prototypes of our coins have two seated figures holding an orb between them, and surmounted by a half figure, winged, doubtless representing Victory. There can be no hesitation in placing these coins between the true Roman issues in Britain and the true line of West Saxon coins. On the obverse of these coins are two letters, separated by a cross, thus: V + N. As this inscription recurs on all five coins exactly in this way, it can hardly be called a blundered legend, as the catalogue styles it.

Let us now turn to two other coins in the British Museum, also struck in gold, having on the obverse a bust turned to the right, considerably ruder than the one just named, and having in front of the head what is either a trident or a diversified form of the cross just named. On the reverse of these two coins we have a cross potent

within a circle of dots, round the outside of which is an inscription (see figs. 2, 3).

It is plain from their weight and other circumstances, that these coins belong to the same series as the former coins, or are continuous with them. They may, on the other hand, be compared with the gold coins, some Merovingian and some struck in this country, found in 1828 at Crondal, Hants, and now in the possession of Mr. Lefroy (see fig. 4). The cross upon their reverses points to their being copies of Christian antitypes, if not struck by Christians.

The inscription on the two coins just named reads directly on one coin and is reversed on the other, but is otherwise almost identical, and is read WVNEETTON and TTE~~E~~NTWV.

It seems clear to me that these coins have nothing to do with the regular Anglo-Saxon series. They have no runes, nor bastard runes, upon them, nor have they any Anglo-Saxon characters on them, but plain Roman letters only, and are copied from Roman types.

If they were struck south of the Thames, as the provenance of those which are known attests, and if they belong in any way to the district of Wessex, there is every probability that they were struck at Winchester, the capital and the burial place of the early West Saxon kings. The Latin name of Winchester is Wintonia. It seems to me that the name on the coins, which is as plain as possible, reads Wintonia (spelt Wuneetton) and nothing else; and that it is at least a plausible theory which assigns them to the mintage of that city. If so, I would respectfully urge that the characters V N, separated by a cross on the other coins, are the initial and the final letter of the same name, and also represent Wintonia.

It has been urged that the initial character is not a W, since that letter is unknown to the Latin alphabet, but surely that letter is an essential letter in Welsh ; and if we are to look for it in early times, we must do so in those curious epigraphic relics of the seventh, eighth, and ninth centuries, which Professors Westwood and Rhys have illustrated, where Romano-Britons record their epitaphs. Some of these are in Roman capitals and some in minuscules ; and among the former W certainly occurs in a curious form, having apparently been constructed out of a ligulated double V.

I would, therefore, suggest that these coins were struck at Winchester, between the time when the Romans left the country and the beginning of the regal series of Wessex ; and that, if not regal issues, they were possibly struck by the earliest bishops of Winchester. I may remark that on one of the Lefroy coins the name Londuni occurs (see Fig. 4), which must mean that that particular coin was struck in London, a fact which adds a strong probability to the view I have just urged. This view is only offered as a tentative conclusion on a difficult issue.

H. H. HOWORTH.

XXI.

ON A UNIQUE STYCA OF ALCHRED OF NORTH-UMBRIA AND ARCHBISHOP ECGBERHT.



Obv.—+AL·FHRHT. Cross.

Rev.—ECG·BERHT · AR. Cross.

AR. Weight 15½ grs.

LAST year I had the pleasure of exhibiting to this society a unique styca¹ of Ethelred I., which filled what has long been a gap in the interesting series of the early kings of Northumbria. The coin which I am now about to discuss is of earlier date; it was formerly among the Bateman heirlooms, and was purchased by me when they were sold. I propose to attribute it to King Alchred, who succeeded Moll *Æthelwald* A.D. 765 or 766, and reigned till 774. The first mention of Alchred in the *Anglo-Saxon Chronicle*² is in A.D. 765. “In this year Alchred succeeded to the kingdom of Northumbria and reigned nine winters.” According to another version,³ he is stated

¹ See *Num. Chron.*, 3rd Series, vol. xii., *Miscellanea*, p. 87.

² *A.-S. Chron.*, S.G., D.

³ *A.-S. Chron.*, S.G., E.

to have reigned only eight winters; and a later chronicler, Henry of Huntingdon, states that he succeeded on the demise of Moll in the sixth year of his reign,⁴ and held it eight years.⁵ William of Malmesbury, another late chronicler, says that Moll fell a victim to the treachery of Alchred, and that the latter, in his tenth year, was compelled to retire from the government which he had usurped. There is a further notice of this king in the *Anglo-Saxon Chronicle* "AN. DCCLXXIV. In this year at Eastertide the Northumbrians drove their King Alchred from York and took Æthelred, son of Moll, for their lord, who reigned four winters." Florence of Worcester derived his parentage from Ida: "Alhedus filius Eanwini, qui fuit Bosae, qui fuit Bleocmanni, qui fuit Idae"; but this seems doubtful to Simeon of Durham, who states: "Alcred prosapiā regis Inae exortus ut quidam dicunt." According to the latter chronicler,⁶ his wife's name was Osgeofu or Osgearna, whom he married in 768, and when banished from the throne he took refuge first in Bamborough, and afterwards with Kenneth, or Cynneth, King of the Picts. That the real name of his wife was Osgeofu seems probable from the letter in Haddan and Stubbs' councils written to Lullus, Archbishop of Metz, in which the writers style themselves "Alhredus Rex et Osgeofu Regina," and request and promise mutual intercession in prayer. There are four coins hitherto published of Alchred, of which three are in the National Collection.⁷ In No. 15 the three last

* Moll succeeded Angust 5th, 759 (Sim. Dun.), 759 *A.-S. Chron.*, D, E, and F; the sixth year, therefore, would be 765, and eight years more would be 773. This is a year short of the next notice of Alchred in the *A.-S. Chron.* (see D and E, which agree).

⁵ Roger de Hovenden gives 765 as his accession, thus agreeing with *A.-S. Chron.*

⁶ Sim. Dun., *M. H. B.*, 663.

⁷ *B. M. Cat.*, vol. i., p. 142, Nos. 18, 14, 15.

letters are retrograde, and all have the animal reverse. Mr. Rashleigh has one from another die, reading ALCHDE,⁸ retrograde also, with the animal on the reverse. Hawkins and Ruding both figure coins of this type, substantially the same as the above, though that in Hawkins seems to be from a different die. The present coin, shown on p. 267, is of a completely new type, having been struck in conjunction with Ecgberht, brother of King Eadberht, who was Archbishop of York A.D. 734 to 766—a period covering the reigns of part of Ceolwulf, of Eadberht, Oswulf, Moll Æthelwald, and part of Alchred. There are no coins of Ceolwulf or Oswulf known, but of Eadberht we have, besides his regular coinage, the well-known stycas with the archbishop's name on the reverse, and a mitred figure which Mr. Rashleigh calls the figure of the archbishop.⁹ There is a fine one of this type in the British Museum (*B. M. Cat.*, vol. i., p. 140, No. 4), and I have, through the kindness of Canon Raine, seen two in brilliant condition at the York Museum. Of Moll Æthelwald there is the unique styca of Mr. Rashleigh attributed to that king and Ecgberht,¹⁰ reading +EDIΓdQΓV on the obverse and EECBERHTAR on the reverse, and the figured coin reading ADBALDI, of which the original is now lost;¹¹ both of which may be compared with the coin now before us.¹²

In the coin now exhibited the first, second, fourth, fifth, and sixth letters are normal in shape and consecutive, the E of Alchred being left out. The third and seventh letters, which are both alike, constitute a difficulty, espe-

⁸ *Num. Chron.*, N.S., vol. ix., Pl. I., 2.

⁹ See *Num. Chron.*, N.S., vol. ix., p. 55.

¹⁰ Hawkins, 584.

¹¹ *Num. Chron.*, N.S., vol. ix., Pl. I., 1A.

¹² The coin ascribed by Lindsay to this king is of Ælfwald I.; see Hawkins, p. 68.

cially the latter, as it is not necessary, apparently, for the king's name, but follows it, reminding one of the letter on the coins of Eadberht. If this letter is considered as a U, and of the class which the Anglo-Saxons derived from the Irish script¹³ and adopted in the north, that is to say the uncial form, which itself was derived from the Roman, the reading would be ALUHRDU, which would be far



Bingley Font, *circ. A.D. 768—770.*

too ancient a form of spelling for this period. On the other hand, if the letter is a Runie one, which, I think, is most probable, then it could only be either Ur or Cen. As there is no form of Ur which resembles it appreciably, it could only be a Cen, which would be the proper letter for the third one in the king's name. This would leave a Cen also for the seventh or last letter, and this might, without too great a stretch, be considered as the initial of the word *cunung*, the usual style of the heptarchic kings of the north; and from this conclusion one may be tempted to speculate whether the strange letter at the end of Eadberht's regal coinage on the obverses,¹⁴ resembling a

¹³ Taylor's *Alphabet*, vol. ii., p. 179.

¹⁴ *B. M. Cat.*, vol. i., p. 140, Nos. 4—7, 9, 10—12.

Greek gamma, is not a similar endeavour to render the same initial. That the word *cunung* was commonly the style of the kings of Northumbria may be seen by referring to the Runic monuments of that country, as, for example, in the Bingley font (see p. 270),¹⁵ of which inscription the following is a transliteration and translation:—

EADBIE RHT · CUNUNG
HET : HIEAWAN : DŒP : STAN : US :
[G]IBID : FUR · HIS · SAULE ✕

“Eadbierht King
Ordered to hew this baptismal stone for us.
Pray for his soul.”

It is a remarkable fact that the Cen in *cunung* is of the exact shape as on the coin now exhibited, while the mention of Eadberht points to a date not far removed from that of Alchred’s reign. On the Ruthwell cross¹⁶ we get

F	N	A	H			
ꝝ		O	F			
I	h	R	I	C	R	
I	I	h	I	I	C	N
F	ꝝ	A	Æ	C	U	
ꝝ	I	X	N	I	N	C
h			C			

From the south side
of Ruthwell Cross in
Northumbria. Date
about A.D. 680 (Stephens,
Runic Monuments, ed.
1884, p. 180).

the same shaped letter no less than six times, in one instance being in the words *riicnae kuningc*.¹⁷ That Runic

¹⁵ Stephens, *Runic Monuments*, ed. 1884, Pt. III., p. 96.

¹⁶ *Ibid.*, Pt. I., p. 416.

¹⁷ The older Con was straight in the upstroke and side stroke, and the bend in the present letter shows that the importance of the different parts of letters being straight for purposes of engraving in stone and wood, was not so great as at an earlier period.

survivals of coins, even to a late date, were not uncommon can be seen on reference to Eanred's stycas,¹⁸ and to the early pennies of Mercia and East Anglia, and in the case of Wen even up to the time of William the Conqueror. In the coin belonging to Mr. Rashleigh, previously referred to,¹⁹ the same letter appears, and has, I presume, been read as a V. But whilst this would appear fatal to my suggestion that a similarly shaped letter on the present styca is a C, I would point out that the letter on Mr. Rashleigh's coin may also be a C, so that it also may stand for the initial of *cunung*. For, on the assumption that the three last letters in the name of Ethelwald are retrograde, it will be noticed that the letter in question holds an analogous position to that on my coin, being immediately after the D. If it is then objected that this method of reading takes the V away from the legend, it can be answered that the letter at the end of the legend is the V in the king's name, and that the A, in a similar manner as the E of the Alchred coin, has been left out altogether, making the reading + EDILCDLV, the last four letters, not three only, being retrograde. Thus we should have +EDILVLD C(VNVNG) on the one, and ALCHRD C(VNVNG) on the other. In conclusion, I may add that since Ruding, fifty-three years ago, stated that a numismatic gap existed of no less than sixteen kings or a hundred and thirty years between Ecgfrith and Eanred, the coins of eight rulers have been described. This seems hopeful for the numismatic history of Northumbria, which more than any other part of the country has to be explained by its coins owing to the dearth of records.

GRANTLEY.

The word is sometimes written Kunung, or Cunung, or Cuning, rarely Kuning. See Stephens, *Run. Mon.*

¹⁸ *B. M. Cat.*, vol. i., pp. 144, 146, 157, Nos. 28, 49, 239, etc.

¹⁹ Hawkins, 584.

XXII.

RICHARD, EARL OF CORNWALL, AND HIS COINS AS KING OF THE ROMANS (1257—1271).

ALTHOUGH never crowned Emperor by the Pope, Richard, Earl of Cornwall, was crowned King of the Romans at Aachen, and was practically Emperor¹ of Germany from his coronation in 1257 to his death in 1271. Called away by troubles in England, he still was able at times personally to look after the affairs of Germany. His title was acknowledged even by the powerful king, Ottocar, of Bohemia, and the rival claimant, Alphonso X of Castile, did not succeed in supplanting him, though Richard's periods of absence from Germany were long.

Richard Plantagenet, Earl of Cornwall and Count of Poitou, the second son of King John, was born in 1209. Already, in early life, he acquired fame during the wars in Poitou and Gascony. A Crusader in the Holy Land, in 1240 he obtained a truce on terms as advantageous as could be expected for the Christians, and, on his way home, acted as mediator between the Pope and the Em-

¹ Long ago, Jacob Paul von Gundling (*Geschichten und Thaten Kaiser Richards*: Berlin, 1719, octavo) explained that Richard ought to be recognised amongst the German Emperors, and G. C. Gebauer, by his "Grab des Interregni" (in his book *Leben und denk würdige Thaten Herrn Richards*, Leipsic, 1744) made this still clearer.

peror Frederic II, his brother-in-law, who appeared to hold him in high esteem.²

After the death of William of Holland, Richard was proclaimed in 1257, at Aachen, King of the Romans, though another party of the electors proclaimed Alphonso X of Castile. Richard, however, was actually crowned the same year at Aachen, with his beautiful wife, Sanchia,³ and opposition practically ceased. No doubt his wealth and magnificence made a great impression on the people, for he was esteemed the richest prince⁴ of his time. The imperial regalia not being immediately obtainable he had special ones sent over from England for his coronation, and these he afterwards presented to the town of Aachen. In addition to his wealth and splendour, he knew how to ingratiate himself with the people by other methods, and confirmed the privileges of several towns, notably increasing those of the coronation town of Aachen. Moreover, according to his declaration⁵ before leaving England, he

² Frederic wrote, in 1237, to Richard, "Dilecto suo sororio," *v. Gebauer, op. cit.*, p. 26.

³ Sanchia was his second wife, daughter of Count Raymond Berengar, of Provence. By his marriage with her he gained powerful connections on the Continent. All Count Raymond's four daughters became queens; the eldest was married to Louis IX, "the saint," of France; the second to Henry III of England; the third, Sanchia, to Richard, King of the Romans; the fourth to Louis's brother, Charles of Anjou, afterwards King of Naples.

⁴ In allusion to some of the methods by which he is supposed to have obtained his wealth he has been called "der reichste Prinz und Geldhaendler" of his time. See Armin di Miranda, *Richard von Cornwallis*, Bonn, 1880, p. 6; cf. H. Koch, *Richard von Cornwall*, Strassburg, 1888, i., p. 101. In this connection it may be mentioned that Henry III., in 1247, granted to his brother Richard the privilege of making the new money in the king's name, and it has been suggested (N.S., Proc., Oct. 1892) that the three pellets on the reverse of the re-coining of A.D. 1248 are Richard's arms.

⁵ Matthew Paris, referred to by Armin di Miranda, *op. cit.*, p. 7.

seems really to have desired to govern for the welfare of the country.

Troubles in England induced his hasty return, but he visited Germany again in 1260, and once more in 1262-4. Then followed the civil war in England and his imprisonment, after the victory of Simon de Montfort at Lewes, 1264. His last visit to Germany was in 1268-9, when he brought back to England his third wife, Beatrix von Falkenstein. He died of apoplexy⁶ at Berkhamstead in December, 1271, the year in which his eldest son, Henry, had been murdered by the sons of Simon de Montfort.

Richard of Cornwall, with the bravery of his uncle, "Cœur de Lion," and the craft of the Plantagenet family, forms no insignificant figure in the list of Emperors, helping, as he does, to fill up the gap between his brother-in-law, the great Hohenstaufen, Frederic II, "the wonder of the world," and Rudolph of Hapsburg, the ancestor of the present Austrian dynasty. His successor in the earldom of Cornwall was his son, Edmund "of Almaine."⁷ Richard, Earl of Cornwall, has often been confused with his uncle, Richard "Cœur de lion."⁸

⁶ Judging from the account of Thomas Wikes, the attack commenced with right hemiplegia and aphasia, and the fatal termination was not long delayed. V. Thom. Galo, *Historiae Anglicanae Scriptores Quinque*, fol., vol. ii., 1687, p. 96.

⁷ Edmund of Almaine was the last of his legitimate descendants.

⁸ A good instance of this popular confusion between the two Richards is seen in Jean de Nostredame, *Les Vies des plus célèbres et anciens poëtes proveniaux* (Lyon, 1575, p. 189). He begins the chapter, "Richard, surnommé Cœur de Lyon, qui fut filz de Henry Roy d'Angleterre, et esleu Empereur des Romains . . ." This mistake of Nostredame has been pointed out by Fauriel and Agnes Strickland. Perhaps a tradition, connected with Richard, may have given the motive to an old German *Volkslied*. This barbaric ballad may be found printed under the title, "Der Grausame Bruder," in *Jungbrunnen*, a collection of *Volkslieder*, by G. Scherer, Berlin, 1875, p. 108, No. 85A. A Pfalsgraf on the Rhine finds that his sister, though

Bearing in mind his long absence from Germany, and the multitude of baronial, ecclesiastical, and anonymous coins (both bracteates and two-faced coins) current in Germany at the time, it is not surprising that German coins bearing the name of Richard should be rare. Moreover, this is not the only probable explanation of their rarity. His father, King John, and uncle, Richard I, were both careless about their names appearing on the coinage. Although Richard I and John must have had English coins, none are known (issued in England) bearing their names; neither do any Aquitaine coins bear the name of King John. As coins of these kings must have been issued bearing the name of a predecessor (v. Hawkins, *Silver Coins of England*, 3rd ed., pp. 192, 193), it seems not unlikely that German coins were issued under Richard of Cornwall bearing the name of one of his predecessors.

Following is a description of the few coins which have been assigned to Richard, King of the Romans; the attribution of the first two only appears certain. I have especially to thank Messrs. Head and Grueber of the

unmarried, is pregnant. Furious, he kills her in the cruellest manner; but in the agonies of death she gives birth to a child. Her lover turns out to be the "King of England," who soon afterwards arrives himself. With his "glittering sword" he pierces the cruel Pfalsgraf's heart, and carries off the new-born child to England. At any rate, considering that Richard, in addition to his own, inherited some of "Cœur de Lion's" popular fame, that his magnificence had made so great an impression in Germany, that his power was chiefly on the Rhine, that even in this century (both Goetz and Cappe fall into the error) he has been spoken of as "King of England," it seems not unlikely that the people amongst whom this *volkslied* originated may have introduced an English prince into it by reason of confused traditions of Richard, King of the Romans, with his actual power on the Rhine, and Richard I of England, with his widespread and terrible warrior's reputation.

British Museum, and the director of the Berlin collection for kind assistance.



1a.



1b.

1. *Obv.*—RICHARD or RICHARD REX^{*} would probably be the legend if it could all be made out. The king, crowned and enthroned, facing, holds in his right hand a palm branch, and, in his left hand, the orb of state.

Rev.—RICHARD REX^{*} if the whole legend could be made out. A crowned half-length figure facing, with his raised hands supports a three-towered building above his head.

H. Dannenber, in *Berliner Blätter*, vol. iii., 1886, Pl. XXV. 15, and again in *Zeit. für Num.*, vol. i., p. 78. H. P. Cappe, *Die Münzen der Deutschen Kaiser*, Dresden, 1848, vol. i., p. 162, Nos. 732 (Pl. XI. 180) and 733. In Berlin collection.

Fig. 1a (after *Berl. Blätt.*, vol. iii., Pl. XXV., 15).

A small number of these pieces were found in September, 1843, on the Castle Hill at Laasphe, near Marburg. The find consisted of thirty-four pieces, and particulars about it are given in the *Zeit. für Münz- Siegel- und Wappen-kunde*, Berlin, vol. iii., 1843, pp. 318, 319.

These pieces were probably issued at the coronation

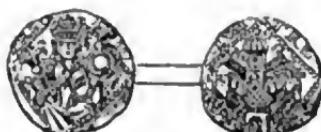
* See discussion in *Berliner Blätter*, vol. iii., 1886, p. 50. Dannenber shows that Cappe's illustration (Cappe, vol. i., Pl. XI. 180) was probably concocted out of several specimens. The obverse and reverse legends have also been read RICARD REX (*Zeit. für Münz.* vol. iii., 1843, p. 319).

city of Aachen, a city especially favoured by Richard. There appear to be several varieties; the legend may commence above or below, or may be blundered on one side. Thus the obverse of a specimen now in the Berlin collection reads WRCH (Fig. 1b, after *Berl. Blätt.* vol. iii., Pl. XXV. 16). And the obverse of another specimen in the same collection reads RCI ; the latter piece has a cinquefoil at the commencement of the legends.

The reverse type, belonging more especially to Aachen, may represent Charlemagne supporting the cathedral of Aachen, which he founded, and in which he was afterwards buried. This explanation of the reverse type seems to me the more probable, as this type first appears, I think, on coins of the Frederics at the same time as the reverse legend, SANCTVS KAROLVS or its abbreviations (see coins attributed to the Emperor Frederic I., Barbarossa, such as Cappe, vol. i., No. 647). Both these types may be dated from the canonisation of Charlemagne¹⁰ by the Archbishop of Cologne and the Bishop of Liége in the presence of Frederic Barbarossa.

Another explanation has been offered, namely, that the crowned figure under a building on the reverse of coins of this type is meant for the son and heir of the sovereign who is represented on the obverse; but this appears unlikely when, amongst other considerations, one remembers that Rudolph of Hapsburg has a similar reverse, but with a crown instead of a crowned figure under the building (Cappe, vol. i., Pl. XI., No. 181).

¹⁰ Charlemagne was also canonised by the anti-pope, Pascal III, in 1165 or 1166.



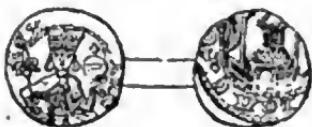
2.

2. *Obl.*—RIC . . . , RICH . . . , or +RIC The king, crowned and enthroned, facing, holding in his right hand a sceptre, terminating in a lys, and in left hand the orb of state. The whole type is enclosed in a diamond-shaped compartment.

Rev.—+TRIMONIA CIVI (= Dordmnd). A building enclosed in diamond-shaped compartment.

The + at the commencement of the legend may be absent. Cappe, p. 163, No. 784. *Cat. de la Collection de Monnaies de feu Chr. Jürgensen Thomsen, Part ii., tome ii. (Copenhagen, 1874)*, p. 166, Nos. 6426-7. There are a number of specimens in the Berlin collection.

Fig. 2 (after Cappe, vol. i., Pl. IX., 148).



3.

3. *Obl.*—+R . . ARI . . IIX. The king, crowned and enthroned, facing, holding in his right hand a sceptre, terminating in a lys, and in his left hand the orb of state.

Rev.—SAN . . COLO . . (= Sancta Colonia). A building with one tower and open door; a flag on each side wall.

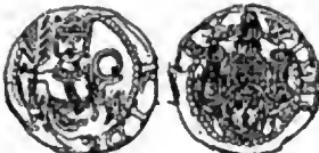
J. F. Walraf, *Beschreibung der Kölnerischen Münzsammlung des Domherrn . . von Merle*, Köln, 1792, p. 19, No. 1. Cappe, p. 163, No. 785, appears to have a different reverse legend (? blundered).

Fig. 3 (after Cappe, vol. i., Pl. XXII., 856).

This piece is, however, not mentioned by Dannenberg (in *Berl. Blätter*, vol. iii., pp. 52—57) and is obviously of doubtful attribution.



4a.



4b.

4. *Obv.*—RIC . . . Type, same as No. 1.

Rev.—WILL&LM REX. Type, same as No. 1.

Garthe Sale Cat., Cologne, 1884, p. 108, No. 8910. Jos. Mader, *Kritische Beyträge zur Münzkunde des Mittelalters*, Prag, 1811, vol. iv., p. 108, No. 60. C. J. Goetz, *Deutschlands Kayser Münzen*, Dresden, 1827, No. 528. The figures in Goetz and Mader are apparently from the same specimen. Cappe, vol. i., p. 162, No. 731.

Fig. 4a (after Goetz, Pl. XLIV., 528), and

Fig. 4b (after Cappe, vol. i., Pl. XI., 179).

These pieces probably do not belong to Richard, but have been noted here on account of their old attribution. Dannenberg (*Berl. Blätt.*, vol. iii., p. 49) points out that the obverse of Cappe's piece (Fig. 4b) should certainly be read (F)RID One thing is certain, namely, that the WILL&LM REX reverse occurs with an obverse reading FRID (Fig. 5a from *Berl. Blätt.*, vol. iii., Pl. XXV., 13), and also with obverse reading KARO (Fig. 5b, from *Berl. Blätt.*, vol. iii., Pl. XXV., 14).



5a.



5b.

I will not enter into a long discussion about these two coins, which I believe are not uncommon, and of both of

which I possess examples. By far the most probable explanation is that of Dannenberg (*Berl. Blätt.*, vol. iii., p. 48), who attributes them both to William, Count of Holland, Richard's predecessor as King of the Romans. When William, in opposition to Frederic II, got himself crowned by force of arms at Aachen in 1248, coins may have been quickly manufactured for him by using old obverse dies of Frederic II¹¹ with a new reverse die, on which the legend WILLHLM REX (Fig. 5a) appears instead of IMPERATOR. Afterwards obverse dies may have been made representing Charlemagne as patron saint, and, in this way, Dannenberg explains the existence of the coin (Fig. 5b), which was previously attributed to the Emperor Charles IV (1347—1378).¹² If it should turn out that Fig. 4a does really represent a coin of Richard, then we must suppose that on Richard's coronation also, coins were struck from one old die and one new one; in this case the old die used would be a reverse of William.

F. PARKES WEBER.

¹¹ As the citizens of Aachen were in favour of Frederic and had resisted the entry of William, the moneyers may have had some satisfaction in thus retaining Frederic's name on the coins.

¹² He cites a coin of Otto IV as evidence that the legend KAROLVS (referring to Charlemagne) may appear without the word SANCTVS.

XXIII.

HERTFORDSHIRE TOKENS.

In the Herts *Genealogist and Antiquary*, by William Brigg, B.A., vol. i., 1893, p. 29, is a note by A. E. G., of a Rickmansworth farthing token, which is believed to have been never previously described.

Obv.—GEORGE WINGFEILD = Grocers' Arms.

Rev.—IN RICKMERSWORTH = G.A.W.

The name of Wingfield is common in the parish registers of both Rickmansworth and the adjoining parish of Sarratt.

The Rev. A. E. Northey, Vicar of Rickmansworth, has been kind enough to search the parish registers with the view of finding some traces of George Wingfield. From these records it appears that Alice Wingfield, wife of George Wingfield, was buried on the 2nd of February, 1665, or, according to our present computation, 1666. We may infer, then, that the initial A in the G. A. W. on the token stands for Alice, and that the farthing which bears no date was struck before 1666. Nothing further, however, can at present be traced with regard to the issuer of the token or his family.

In my own collection is another token that was found at Great Berkhamsted, Herts, in the garden of Colonel

Hanbury Barclay, and was by him kindly presented to me.

Obv.—JOHN . WEADEN . 1667 = HIS HALFE PENY

Rev.—AT BATCHWORT^H BRIDG = A bridge apparently of four arches, with a hand-rail.

The final H in Batchworth is somewhat doubtful. No such place as Batchworth is to be found in the gazettters, though, according to the postal guide, there is a post-office at Batchworth Heath, near Rickmansworth. There can, however, be but little doubt as to the proper attribution of this token. Singularly enough, I am part proprietor of what was once a cotton-mill, and was afterwards used in the preparation of materials for paper—Batchworth Mill, situate in the parish of Rickmansworth, and in the small hamlet of Batchworth. This mill stands upon the river Colne, and a hundred yards or so lower down the stream is a bridge over it known as Batchworth Bridge. The present structure is of one arch, in iron, and is comparatively modern, having been built about sixty years ago. It stands, however, on the site of an older bridge, of which, or more probably of its predecessor, we have no doubt the representation on this token.

The *County Press* of December 28, 1833, says:—"The southern entrance to the town of Rickmansworth, through the village of Batchworth, has received considerable improvement from a handsome Cast-Iron Bridge of one arch, being built over the river Colne, the old dangerous dilapidated one of wood having been removed. This elegant structure was opened for public traffic on Wednesday, 11th December (1833)." An old coloured print, published in Hassell's *Picturesque Tour of the Grand Junc-*

tion Canal, 1819, shows Batchworth Mill and Lock, with a bridge by its side, apparently a wooden structure of a single span, and with wooden hand-rails. This bridge, however, is not Batchworth Bridge, being probably over the Chess, and not over the Colno.¹

It is by no means impossible that tolls may have been payable for the passage of vehicles over the real old Batchworth Bridge, and that John Weaden may have been the recipient of these tolls, and therefore have had need of small change such as these tokens afforded. Certain it is that the name of Weaden or Weedon was in the seventeenth century common in the parish of Rickmansworth, where it now survives. The vicar, the Rev. A. E. Northey, has kindly made search in the registers, and has furnished me with the following extracts:—

BAPTISMS.

1666.—Eunice Weedon, daughter of John and Sarah, his wife, was baptized 20th February.

BURIALS.

1668.—John Weedon, son of John and Sarah, was buried the 29th of April.

1671.—John Weedon, son of Hezekias, was buried the 17th of July.

Whether this John Weedon was the issuer of the token, and whether his wife's name was Sarah, and they had one child born in 1666, and lost another in 1668, and whether the issuer of the token died in 1671, are questions still to be solved. There being no initials on the token,

¹ For this extract and reference I am indebted to our member, Mr. R. T. Andrews, of Hertford.

we have nothing to guide us as to the name of the issuer's wife. Enough evidence has, however, I think been adduced to justify us in referring the token to Batchworth Bridge, in the parish of Rickmansworth, in the county of Hertford.

A third Herts token, not in Williamson's edition of Boyne, is of Ware.

Obv.—IOHN CRISPP AT · THE = a lion rampant.

Rev.—IN · WARE · 1666 = I.M.C.

Examples of this farthing are in Mr. Andrews' collection, in that of Mr. A. E. Gibbs, and in mine.

A fourth, lately found, is of St. Albans, and reads thus:—

Obv.—THOMAS HVDGSON IN ST. = T · S · H.

Rev.—ALBANS · MEALEMAN = HIS HALF PENY (in three lines).

This also is in Mr. Andrews' collection and has been kindly communicated by him to me.

A William Hudson was chamberlain of St. Albans in the time of Edward VI.

A fifth token, in Mr. Gibbs's² collection, is of Elstree.

Obv.—IOHN AXTELL IN = HIS HALFE PENY.

Rev.—ELLSTREA MERSER 67 = I.S.A.

Axtell is a common Hertfordshire surname, but I do not know it in any close connection with Elstree.

JOHN EVANS.

² *The Herts Genealogist*, I. 119.

XXIV.

MEDALS AND MEDALLIONS OF THE NINETEENTH CENTURY, RELATING TO ENGLAND, BY FOREIGN ARTISTS.

In this paper I wish to bring before the Numismatic Society the most important and typical specimens of modern medallic work by foreign artists which relate to England. Amongst these will be found, I believe, not only some of the finest modern medals, but some by artists (as Vechte, Roty, Pistrucci, and Scharff) for whose works a place may justly be claimed, side by side with the works of art of any age. By selecting exclusively the work of foreigners, the author does not wish to disparage English productions. England has the beautiful work of the Simons¹ to boast of, not to speak of some more modern artists. Moreover, surely the appreciation of art should be in an international spirit, and the French seem to recognise this in placing some pictures by modern English artists with their own pictures in the Luxembourg Gallery. In the same liberal spirit England has not been

¹ One may well be astonished to see that amongst the French medals in the *Trésor de Numismatique*, Simon's pattern-coins of Oliver Cromwell are claimed as probably the work of Jean Warin! That the Simons may have been influenced by French work is quite another question.





behindhand as regards her employment of foreign medalists; quite recently, indeed, the Corporation of the City of London has set an example by employing, as well as English artists, such foreign medallists as A. Scharff, of Vienna, and Charles Wiener, of Brussels. I learn, however, that Scharff was employed by the Corporation only indirectly, through the firm of Elkington & Co., to whom we are also indebted for the beautiful works executed by Morel Ladeuil in this country.

Many of the following medals are personal, but others have historical interest, and help to fill up gaps left by English artists in the medallic commemoration of English history. Most of them are struck medals, but as some, like many French medallions, are cast, I will add a few words on the subject of cast medallions.

The Italian medals of the fifteenth century, and many of those of the sixteenth century, are cast; so also are many German and some French medals of the sixteenth century. In the seventeenth century come the magnificent cast medals by the French artists Jean and Claude² Warin, Guillaume and Abraham Dupré, and by the English Simons; the medals of Peter van Abeele, in Holland, are mostly made of two cast³ plaques fastened back to back, though perhaps the first specimens were

² Claude Warin was probably a relation of Jean Warin, and seems to have worked for some period in England before he finally settled at Lyons. His medals are cast and of a somewhat sculpturesque style, imitating that of Guillaume Dupré rather than that of Jean Warin. Mons. Natalis Rondot has shown (*Rev. Numism.*, 1888, pp. 121, *et seq.*) that the medals of Englishmen signed WARIN or VARIN are all probably the work of Claude Warin.

³ Although this is contrary to the view which has been most frequently expressed, I feel confident that those who carefully examine the medals will confirm me.

repoussé and chased. At the end of the seventeenth century, and during the eighteenth century, come the large series of Italian portrait medals, cast and of rather rough work, mostly made at Florence; of the same period there exist some cast portrait medallions by various German artists.⁴ In the present century, mostly about 1830, a large number of cast portrait medallions were made by the French sculptor, David d'Angers; and some were made about the same time by his contemporaries, the sculptor Pradier (of the Duc d'Orléans), Barre père (of the Duc de la Rochefoucauld, 1829), Depaulis (of Henri Baron de Longuêve, 1831), Domard (of the engineer Brisson, 1829), and E. Dubois (of a mint official, 1828).

More recently there have been a large number of cast medallions made in France, the number having been greatly increased since the introduction into general use of the reducing machine,⁵ by the help of which large cast medallions serve as models for the mechanical production of reduced copies in steel, from which incuse dies are taken for striking the ordinary medals. For further details of the whole process, see under Medal, No. 84.

In 1881 Professor Legros⁶ introduced the making of cast portrait medallions into England, and since then many such have been made here, chiefly by his pupils,

⁴ See those in bronze or steel, cast or cast and chased, exhibited in the imperial collection of Vienna. I recently showed a medallion in steel, cast and chased, to the Numismatic Society. It is of good work, and I think represents the portrait of Christian Wermuth (sen.) by himself. I possess likewise a cast bronze portrait medallion, signed by Ant. Domanek (1713—1779), the sculptor, of Vienna. In England we have Dr. W. Hunter's medal by Ed. Burch, R.A.

⁵ Though long known, Caqué was the first in France to make extensive use of it.

⁶ See medals described under his name.

some somewhat in the style of the fifteenth century medals by Pisano. Amongst modern cast medals of other countries, I may mention one by Anton Scharff, of the Imperial Mint at Vienna (portrait of Herr Backofen von Echt, 1890, a lover of the fine arts), some portrait medallions by the young sculptor, W. Hejde, of Vienna, and lastly, Gustav Eberlein's medal on the silver wedding of the Crown Prince Frederic in 1883. Recently in England, by help of the reducing machine, several struck medals have been issued which retain much of the modeller's original effect. Amongst these medals may be mentioned A. Gilbert's Art Union medal for the Queen's Jubilee, 1887; the Countess F. Gleichen's medal given as prize at the Royal Agricultural Society's show held at Windsor in 1889; H. Bates's medal of William Guy, 1885 (the Royal Statistical Society's "Guy medal" instituted in 1891); Frank Bowcher's beautiful prize medal of Messrs. Cope and Nicol's School of Painting, 1891; and G. Frampton's Winchester Quingentenary medal of 1893.

For their kind assistance in this paper I have to thank Mr. Gruber, of the British Museum, as well as some other authorities of the British and South Kensington Museums, of the Royal Mint in London, and of the Paris Mint, also Prof. Hans Hildebrand of Stockholm, Messrs. Welch, Helfricht, Egger, Bowcher, Ready, Pinches, Thomas, and others.⁷ Though a large number of the following medals must be already familiar to most members of the Numismatic Society, many are still probably hardly known in England. I have in general fully described

⁷ For the short notices on the different artists as well as for references to some of their medals, the *Dict. gén. des artistes Français*, by Bellier de la Chavignerie and L. Auvray (Paris, 1868-85), Nagler's *Künstler Lexicon*, and the *Medallic Illustrations of English History* (London, 1885) have been invaluable, but information has also been obtained elsewhere.

the more important and characteristic medals, but those forming part of Mudie's series⁸ and Durand's series,⁹ as well as some already fully described by Mr. Grueber, &c., have merely been referred to. The arrangement is under the names of medallists placed in alphabetical order, and an attempt has been made to make the paper as useful as possible for purposes of reference by mentioning all the medals of lesser importance, as well as those which are fully described, and by appending an index of the persons and events commemorated on the medals, which, in the case of unsigned medals, will be found especially useful.

References have been made to a museum, when possible, in preference to a private collection. The plates are mostly from specimens in my own collection, but the reduction of size, entailed from want of room, somewhat, I fear, impairs their value. No historical medals by French artists of the first Empire have been figured, these medals having already been abundantly illustrated in the *Trésor de Numismatique*,¹⁰ Millin's book,¹¹ Mudie's book, &c. In

⁸ Mudie's National Series of English Medals was finished in 1820, and many foreign as well as English medallists were employed on them. They commemorate the British victories over Napoleon, and have been described in a book, *An Historical and Critical Account of a Grand Series of National Medals. Published under the direction of James Mudie, Esq.*, London, 1820. Quarto.

⁹ Amédée Durand edited a large series of Medals between 1818 and 1846. It was entitled, *Series Numismatica Universalis Virorum Illustrum*, and contains the portraits of many famous Englishmen. Several of these medals have been described in the *Medallic Illustrations of English History*. London, 1885.

¹⁰ *Trésor de Numismatique*, the volume on Medals of the first Napoleon. Besides the medals illustrated in this volume, some medals relating to England, 1800-1804, may be found illustrated in the volume on Medals of the first French Republic.

¹¹ T. Millingen's English edition of A. L. Millin de Grand-maison's *Medallic History of Napoleon*. London, 1819—1821. 4to.

in this small paper many medals are described both of historic, personal, and artistic interest, and I hope it may prove, like Mr. Grueber's descriptions of modern English personal medals,¹² of some service to any one who undertakes to carry on the excellent *Medallic Illustrations*¹³ to present times.

ABRAMSON or ABRAHAMSON, Abraham. See ADDENDA.

ANDRIEU, Bertrand, French medallist (1761—1822); pupil of Lavaux. Many of the Napoleonie medals are his work, but few find a place in the English series.

1. Napoleon's *Armée d'Angleterre* quits Boulogne, 1805. See description under No. 28.
2. Re-establishment of the British Roman Catholic College in Paris (1802?).

Obv.—Same as No. 1.

Rev.—HIBERNI ANGLI SCOTI PRO FIDE ET LITTERIS IN GALLIA HOSPITES. Shamrock below legend.

1·6 inches (diam.); struck; AE (M.B.). *Trésor*, Pl. VI, No. 3.

This medal was struck in England. There is a similar medal by Gatteaux, described under his name (No. 97).

BARRE, Jean Jacques (not Barré, as written in English books), père, French medallist (1793—1855). "Graveur général des Médailles" from 1842. His eldest son, Jean Auguste Barre, occupied himself with sculpture, but his younger son, Désiré Albert Barre (1818—1878) was a medallist, and succeeded his father in 1855 as *graveur général* at the Paris Mint.

¹² *Papiers in Num. Chron.* from 1887.

¹³ *Medallic Illustrations of English History to the death of George II.* By Messrs. Hawkins, Franks and Grueber. London, 1885.

3. Battle of Vimiera, 1808. Mudie's National Series, No. 13, obverse.
4. Visit of the allied Sovereigns to England, 1814. Mudie's National Series, No. 30, reverse.
5. The English re-entered Hanover, 1814. Mudie's National Series, No. 31, reverse.
6. Shakespeare, Medal in Durand's Series. *Med. Illust.*, vol. i. p. 210—48.
7. Shakespeare, Memorial Medal, 1844. *Med. Illust.*, vol. i., p. 212—56.
8. George IV.—*Obv.*—GEORGIUS III. D. G. BRITAN-NIAR. REX. F. D. His laureate head to right. Signed BARRE F. DE PUY-MAURIN D.
No reverse. 1·6; struck; Æ (M.B.).

BAUERT, Georg Valentin, son of Joh. Ephraim Bauert, a Swedish engraver. Studied under John Milton, engraver to the London Royal Mint. His works date from 1790 to 1810.

9. England under George III., 1800.

Obv.—GEORGIUS III. DE. GR. MAG. BRITAN. FRAN. ET. HIB. REX. Laureate head of George III. to right. Signed BAUERT. F.

Rev.—Scene representing a manufactory, vessels on the sea and ploughing, indicative of industry and commerce. In exergue MDCCC.

1·6; struck; Æ (M.B.).

BLACHÈRE, French medallist.

- 9A. Siege of Sebastopol, 1854—1855.

Obv.—Plan of Sebastopol and the besieging army. Signed BLACHÈRE F.

Rev.—Inscription within laurel-wreath: SIÈGE DE SÉBASTOPOL PAR LES ARMÉES FRAN-

CAISE, ANGLAISE ET TURQUE 1854—
1855.

1·65; struck; AE (F.P.W.).

9B-9D. There are also medalets (size .95 inch) on the capture of Bomarsund and the battles of Alma and Inkermann in 1854.

BOEHM, Sir J. Edgar, Bart., R.A. Born in Vienna, 1834; resided in England after 1862; appointed sculptor in ordinary to the Queen in 1881; R.A. in 1882; baronet in 1889. He died suddenly in December, 1890. His father, J. D. Boehm, was a medallist and director of the Mint at Vienna, and Boehm's earlier work was in the same direction. His initials appear on the truncation of the Queen's bust on the coins issued for the Jubilee year, 1887.

10. Thomas Carlyle. Birthday Memorial Medal 1875.
Described by Grueber in *Num. Chron.*, 1888, p. 276, 1.

11. General Charles Richard Fox, the Numismatist, 1862.

Obv.—LT.-GEN. C. R. FOX AE ET SUAE LXVI.
NOV. VI. 1862. His head to left with bare neck.
Signed on the truncation, "J. E. Boehm fe."

Rev.—Open book, inscribed GREEK COINS — $N = 285$ — $R = 3580$ — $A = 6168$. Total = 10033.
Below the book is a facsimile of his signature.

2·25 inches; struck; AE (F.P.W.). Obverse figured.
Pl. XVII.

General C. R. Fox (1796—1873) was son of the third Lord Holland. He began coin-collecting early in life, and his large and valuable collection was purchased by the Berlin Museum after his death.

BORREL, Valentin-Maurice (1804—1882); French medal-list, pupil of J. J. Barre. His son, Alfred Borrel, is a contemporary medallist of Paris.

12. Visit of Queen Victoria to Belgium, 1843.

Obv.—VICTORIA REINE D'ANGLETERRE. Head of Queen to left. Signed BORREL.

Rev.—Inscription SA MAJESTÉ, &c.

1·0; struck; AR (M.B.).

13. Visit of Queen Victoria to France, 1843.

Obv.—Same as No. 1.

Rev.—Inscription commemorating her visit to Louis Philippe at Château d'Eu.

1·0; struck; AR (M.B.). (Salon of 1844).

A variety in Brit. Mus., is signed on obverso BORREL. F. (Æ, M.B.).

13A—13F. There are also medals by Borrel (struck, size 1·45 in.), commemorating the capture of the fortress of Bomarsund by the Baltic fleet in 1854, and the battles of Alma, 1854, Inkermann, 1854, and Tchernaya (or the bridge of Traktir), 1855. There are also a medal commemorating the visit of the French National Guard to London, in September, 1848, and a medal commemorating the return visit of Englishmen to Paris in April, 1849.¹⁴

13G. Daniel O'Connell. Portrait medal described by W. Frazer, in the *Journ. Roy. Hist. and Arch. Ass. Ireland*, 1888, page 326. (1·0; struck; AE.)

Bovx, Jean François Antoine, the medallist. Born in Geneva, 1803; died there 1877.¹⁵ Naturalised Frenchman; pupil of Pradier. Amongst his most notable medals are those of the reformer Calvin and the enormous one of the railway laws, 1845, but perhaps his "Schutzenthaler" of 1865 for Canton Schaffhausen, and that of 1874 for Canton St. Gall, may be preferred. Hugo Bovy, his nephew and pupil, has also made medals (notably the beautiful

¹⁴ There exist also small unsigned French medalets commemorating the two events together.

¹⁵ Vapereau, *Dict. des Contemporains*.

one of 1887 for the "Tir Fédéral" at Genova), but none, I think, relating to England. Some of Antoine Bovy's pieces are less hard in appearance than most struck medals under Louis Philippe and Napoleon III.

14. Lord Dudley Stuart; memorial, 1859.

Obv.—DVDLEY C. STVART CAVSAE POLONÆ, &c. His head with bare neck to right. Signed A. BOVY.

Rev.—Map of Central Europe, showing the large extent of ancient Poland. ILLIC HONOS NOMENQVE TVVM LAVDESQVE MANEBVNT.

2·5; struck; AE (M.B.). Obverse figured. Pl. XVII.

Lord Dudley-Coutts Stuart, M.P., was born in 1803. In 1824 he married a daughter of Lucien Bonaparte, Prince of Canino. He died at Stockholm, 1854. Polish citizens had this memorial made in acknowledgment of his sympathy with their cause and friendship for Polish exiles. He had embraced their cause on the insurrection of 1830, and had adhered to it with constancy.

14A. International Exhibition at London, 1862.

Obv.—VICTORIA QUEEN OF ENGLAND. Her laureate head with bare neck to left. Signed A. BOVY.

Rev.—View of Exhibition buildings. In exergue, UNIVERSAL EXHIBITION OF LONDON, 1862. Signed MASSONNET EDITOR.

2·0; struck; white metal (F.P.W.).

15. The battle of Alma, 1854.

Obv.—NAPOLEON III EMPEREUR. His bare head to left. Signed A. BOVY.

Rev.—Victory puts the Russian eagle to flight and plants the French and English standards on the banks of the river Alma, who is personified lying to right and lifting up an arm in token of terror.

On the left, winged Fame, seated on a heap of arms and an anchor, inscribes the success on a shield. In exergue, BATAILLE DE L'ALMA 20 SEPTEMBRE 1854. Signed A. BOVY.

2·85; struck; AE (F.P.W.).

The following medal has also been attributed to Bovy:—

15A. Charles Philip de Bossot, Governor of Cephalonia, 1810—1813.

Gruober, *Num. Chron.*, 1888, p. 80, No. 1. The presence of the Greek letter, delta, in the artist's signature renders the attribution to Bovy doubtful.

BOYARD, a medallist, who worked in France.

16. The Battle of Navarino, 1827.

French Medal. Gruober in *Num. Chron.*, 1890, p. 65.

BRENET, Louis, son of N. G. A. Brenet. French medallist and painter, a pupil of Bridan and Bosio. He was born in 1798.

17. Admiral Lord Exmouth, 1816. Mudie's National Series, No. 39, obverse. It is signed LOUIS BR., and the name Louis Bruël has been suggested (misprint?) in *Num. Chron.*, 1891, p. 83.

BRENET, Nicolas-Guy-Antoine, French medallist, pupil of Girod and Gatteaux. From 1808 he was employed much on the Napoleonic medals, and also by Mudie for his "National Series." He died at Paris, 1846. In the fifth annual Mint Report one of Brenet's medals is described (p. 18), and figured as a medal by Pistrucci of Queen Caroline, the wife of George IV. of England. This medal is really of Queen Caroline of Naples (Millin,¹⁶ Pl. LIII. 293;

¹⁶ All references to Millin are to J. Millingen's English edition of A. L. Millin de Grandmaison's *Medallic History of Napoleon*. London, 1819—1812, quarto.

Trésor, Pl. XXVIII. 3), and Brenet has signed himself, as on Mudie's No. 32, by the first two letters of his name, but instead of BR, he has used the Greek capitals BP, mistaken by the author in the Mint Reports for the signature of Benedetto Pistrucci.

18. The Battle off Cape St. Vincent, 1797. Reverse of Mudie's series, No. 4.
19. Defence of Acre, 1799, by Admiral Sir Sydney Smith. Mudie's Series, No. 7, reverse.
20. Foundation of the Royal Military College at Sandhurst, 1802. Mudie's Series, No. 11, reverse.
21. Portrait of the Duke of Wellington. Obverse of Nos. 12, 15, 23, 25, 35, 36 of Mudie's Series.
22. Battle of Albuera, 1811. Reverse of No. 18 of Mudie's Series.
23. The British Army enters Madrid, 1812. No. 21 of Mudie's Series, reverse.
24. Battle of Toulouse, 1814. No. 26 of Mudie's Series, reverse.
25. Treaties of Paris, 1814 and 1815. No. 29 of Mudie's Series, reverse.
26. Return of Napoleon, 1815. Obverse of No. 32 of Mudie's Series.
27. Surrender of Napoleon to Capt. Maitland, 1815. Reverse of No. 37 of Mudie's Series.
28. Napoleon's "Armée d'Angleterre" quits Boulogne, 1805. (Napoleonic medal.)

Obv.—NAPOLEON EMP. ET ROI. His laureate head to right. Signed ANDRIEU F.

Rev.—L'EMPEREUR COMMANDE LA GRANDE ARMÉE. Eagle, throne, sceptre, and thunder-bolt. Signed BRENET. F. DENON D. In exergue LEVÉE DU CAMP DE BOULOGNE LE XXIV AOUT MDCCCV PASSAGE DU RHIN LE XXV SEP^{BR}. MDCCCV.

1·6; struck; Æ (M.B.).

29. Same reverse, but with obverse by Droz, dated 1806, similar to the obverse of No. 115. (Millin, Pl. XXXIV., 103).

30. Napoleon at Saint Helena (*Tresor*, Pl. LXVIII. 7). The obverse of this medal is signed by Brenet.

31. The obverse of No. 30 occurs also as a reverse, with obverso an unsigned laureate head of Napoleon to right without legend.

32. Napoleon's remains brought back to France by the Prince de Joinville, 1840.

Obv.—L'ANGLETERRE REMET A LA FRANCE LES CENDRES DE NAPOLEON. England and France standing at the tomb of Napoleon I.; above is a small figure of Fame flying, holding wreath and blowing trumpet. Signed BRENET. In exergue XV. OCTOBRE, MDCCXXX.

Rev.—LOUIS PHILIPPE I. RÉGNANT — RAMENÉES EN FRANCE PAR LE PRINCE DE JOINVILLE LE XXX. NOVEMBRE MDCCXXX. Below the inscription, two olive sprigs.

1·6; struck; AE (M.B.).

CAQUÉ, Armand-Augustin, French medallist (1793—1868), pupil of Raymond Gayrard, and of the Rochefort school. From 1817—1818 he was employed in the Mint at the Hague. From 1853—1868 was employed by Napoleon III. He worked for Durand's "Series Numismatica Universalis Virorum Illustrium." Caqué was the first in France to make considerable use of "reducing machines," though a very old reducing machine, preserved in the "Conservatoire des Arts et Métiers" at Paris, shows that they had long been known. He died from pneumonia, contracted on tumbling into the water of the mills used for his machines.

33. Medal of William Congreve, the dramatist, in Durand's Series. (*Med. Illust.*, vol. ii. p. 490—30.)

34. Medal of William Camden, author of the book "Britannia." Durand Series. (*Med. Illust.*, vol. i., p. 230—90.)

35. Medal of Francis Bacon, Lord Verulam, in Durand's Series. (*Med. Illust.*, vol. i., p. 245—15.)

36. Medal of Dr. Joseph Priestley, in Durand's Series. Duisburg," No. DCVI. 3.

37. The Crimean War, 1854.

Obv.—TURKEY . ENGLAND . FRANCE . CIVILISATION. GOD DEFENDS THE RIGHT. Queen Victoria, Napoleon III., and the Sultan standing, joining hands, the Queen in the centre. Signed CAQUÉ. F.

Rev.—IN THE YEAR 1854, &c. Signed OBERT ÉDITEUR.
2; struck; AE (F.P.W.).

There exist other sizes and varieties of this medal.

38. The French people to the English Nation, 1830.

Obv.—ALL MANKIND ARE BROTHERS. PEACE AND LIBERTY. Winged male figure, nude, standing on globe, a flame over his head, holding in right hand a branch and in left a flaming torch. Various emblems in the field. Signed GAYRARD. S. CAQUÉ IN.

Rev.—THE FRENCH PEOPLE TO THE ENGLISH NATION. PARIS XXVII . XXVIII AND . XXIX. JULY M.VCCCXXX (for MDCCXXX.)

1·45; struck; AE (F.P.W.).

This medal was probably issued as a response to English

" C. L. Duisburg's edition of C. A. Rudolphi *Recentioris ævi num. virorum de rebus Med.* Danzig, 1862.

sympathy. Sir John Bowring headed a deputation, after the French revolution of 1830, bearing a congratulatory address from the citizens of London to the French people.

38A. The Prince of Wales' prize medal for Canadian Schools, 1860.

Obv.—Head of the Prince of Wales to left. Signed CAQUE F. GRAVEUR DE S. M. L'EMPEREUR.

Rev.—Long inscription EDUARDUS ALBERTUS, &c. 2·15; struck. Figured in Leroux *Le Médallier du Canada*. Montreal (1888), p. 103; MacLachlan, *Canadian Numismatics*, No. CLXXIII.

38B. Canadian Exhibition of Agriculture.

The medal figured in Leroux, *op. cit.* p. 96, No. 610.

CAUNOIS, François-Augustin (1787—1859), a French medallist, pupil of Dejoux.

39. John Locke, the philosopher. Memorial Medal in Durand's Series. (*Med. Illust.*, vol. ii., p. 272—74.)

COQUARDON, a medallist, who worked in France.

40. Queen Caroline, on her death, 1821.

Obv.—CAROL. BRUNSWICENSIS D.G. BRITANNIÆ REGINA. Bust of Queen Caroline to right. Signed COQUARDON, F.

Rev.—OBIIT ANNO MDCCCXXI. Scandal resting on part of a globe, marked BRUNSWICK and ANGLETERRE, dazzled by the splendour of a constellation in the skies marked CAROLINA. A floating figure of Truth points to it. Behind is an altar with the bust of Queen Caroline.

2·4; iron casting (probably of a struck medal), in the British Museum.

COURIGUER (or CURIGER), worked for Mudie's series of National Medals. He was probably one of the Swiss Curigers, known for their small portraits in coloured wax.

41. Death of Sir John Moore at Corunna, 1809. Mudie's National Series, No. 14, *reverso*.

DANTZELL, JOSEPH (1805—1877), French medallist. He was the son of a gem-engraver at Lyons.

41A. Marriage of the late Duke of Hamilton and Princess Mary of Baden, 1843.

This medal was exhibited at the Paris Salon, 1844 (No. 2194 of the official catalogue).

William Alexander Anthony Archibald, eleventh Duke of Hamilton, was born in 1811, and on 23rd February, 1843, married the Princess Mary of Baden, youngest daughter of the Grand Duke Charles Louis Frederick, of Baden, and second cousin to the Emperor Napoleon III.

DAVID D'ANGERS, Pierre-Jean, the great French sculptor (1789—1856), pupil of the painter Louis David and Rolland. David's political sympathies are sometimes manifest in his medallions. His numerous works in sculpture and most of his medallions can be seen in the Musée David, at Angers. Of his numerous medallions the following find a place in the English series; they are all uniface portrait medallions cast in bronze:—

42. Sir John Bowring, 1832. His profile head to right.
Leg. "John Bowring." Signed "P. D. David,
1832."

6·1; cast; Æ (F.P.W.).

The artist's signature is here P. D. David, instead of P. J. David. I do not know that there is any explanation for this, any more than for his wrong initials on the medal of Flaxman (No. 46).

Sir John Bowring, M.P., F.R.S., &c., the diplomatist and linguist, lived 1792—1872. In 1830 he headed a deputation bearing a congratulatory address from the citizens of London to the French people on the revolution in July. This address probably accounts for the medal of "The French people to the English nation," 1830 (see Caqué's medal, No. 38), and may also account for the existence of this medallion made by David d'Angers, an ardent upholder of liberty. There are two other points, as regards Sir John Bowring, of special numismatic interest; firstly, the halfpenny token issued in 1670 by his ancestor, John Bowring of Chumleigh, Devonshire; secondly, it is to Sir John Bowring's motion of 1847, in the House of Commons, that we owe the coinage of silver florins in 1849 (see Fourth Mint Report, 1874, p. 8).

43. Sir M. I. Brunel, 1828. His clothed bust to right.
Leg. "Mark Isambart Brunel." Signed "David, 1828."

4·9; cast; Æ (F.P.W.).

Sir M. Isambart Brunel, the engineer of the Thames tunnel, was born 1769 in France, but became a naturalized Englishman, and died in England, 1849.

44. Lord Byron, memorial. His profile head to right.
Leg. LORD BYRON. Signed DAVID.

5·4; cast; Æ (F.P.W.).

Lord Byron (1788—1824) went to Greece in 1823 and

died at Missolonghi, 19th April, 1824. David d'Angers was much interested in the Greek struggle for independence,¹⁸ and this may be, rather than the fame of Byron as a poet, the *raison d'être* of the present medallion.

45. George Canning, the statesman, 1827. His profile bust with bare neck to left. *Leg.* GEORGES CANNING. Signed DAVID, 1827.

5·0; cast; Æ (F.P.W.).

The specimen in my collection has been slightly modified from David's work, perhaps for the better. The legend is incuse, instead of the very high relief in David's original.

46. John Flaxman, the sculptor, 1755—1826. His profile head to right. *Leg.* "John Flaxman STA-TUAIRE ANGLAIS." Signed "L. J. David."

6·7; cast; Æ (F.P.W.).

As regards the signature being L. J. David, instead of P. J. David, see remark under No. 42. In 1816, when David d'Angers wanted employment in England, Flaxman is said to have refused him assistance, on account of his name being the same as that of his teacher, the painter Louis David, one of the "regicides" of the Convention.

47. Sir John Franklin 1829. His clothed bust to right. *Leg.* "Captain Franklin, R.N." Signed DAVID, 1829.

4·9; cast; Æ (F.P.W.).

¹⁸ Of his own works David's favourite was the "Young Greek at the Tomb of Marco Botzaris," erected at Missolonghi.

Sir John Franklin, born 1786, Arctic explorer, was really the discoverer of the North-west passage. He did not return from his last voyage, and after several "Franklin Relief Expeditions" it was ascertained that he had died in 1847.

48. Amelia Opie, 1829. Her draped bust with high cap to left. *Leg. AMELIA OPIE.* Signed DAVID. 1829.

5·25; cast; Æ (F.P.W.).

Amelia Opie (1769—1853), authoress, was wife of the painter Opie, and a friend of David d'Angers. Of David she said that "he did not know that he was a great man."

49. George Pitt Rivers, 4th baron Rivers (1810—66), medalllic portrait, 1834. His profile head to right. *Leg. "Pitt Rivers."* Signed "David, 1834."

6·3; cast; Æ (F.P.W.).

50. Sir John Ross, the Arctic explorer, 1836. His clothed bust to left. *Leg. "Capt. Sir John Ross, C.B., &c."* Signed "David, 1836."

7·3; cast; Æ (F.P.W.).

Sir John Ross, the Arctic explorer, born 1777; unsuccessful in his search after Franklin, 1850; was made a rear-admiral in 1851; died 1856.

51. Admiral Sir Sidney Smith (1834?). His profile head to right. *Leg. "W. Sidney Smith."* Signed "David 1834" (but the last numeral is uncertain).

6·4; cast; Æ (F.P.W.).

Sir Sidney Smith, in 1799, conducted the famous defence of St. Jean d'Acre, and obliged Napoleon to raise the

siege. After the restoration of the Bourbons he lived much in Paris, and died there in 1840. He is buried in the cemetery of Père la Chaise, at Paris, and the marble medallion on his tomb appears to be an enlargement from this medallion by David.

52. J. Temple Leader, M.P., 1838. His profile head to right. *Leg.* "J. Temple Leader." Signed "David 1838." 6.75; cast; \mathbb{A} (F.P.W.).

J. Temple Leader, born in 1810, was M.P. for Bridgewater in 1835, for Westminster in 1838—1847; a "Radical reformer."

The specimens of these medallions in my collection were all, except that of Canning, cast by L. Richard, and most bear his signature on the back. L. Richard was the favourite founder and friend of David d'Angers, and there is a medallic portrait of him, signed "David 1834." Ferdinand Liard, so well known by his casts of early Italian medals in the South Kensington Museum and elsewhere, is the son-in-law of Richard, and cast the medallion of Darwin (figured No. 143), &c. F. Liard's son, A. Liard, is now much employed by the Paris medallists. There is a plaque portrait of A. Liard by A. E. Lechevrel (Salon, 1893), and a medallion with F. Liard's portrait by Fremy, 1866.

53—58. Besides these medallions of David there are also medallions by him of James Watt; John Wilkes; John Pentland (naturalist); Lady Sydney Morgan (1783—1859), the Irish novelist; Mary Somerville (1780—1872), natural philosopher. There is also one with the name James Augustus Washington, dated 1831; he is stated, in the catalogue of the Musée David, at Angers,

to be a descendant of the first president of the United States of America ; but this appears incorrect, and he may have been an Englishman.

DEPAULIS, Alexis-Joseph, French medallist (1792—1867), pupil of Andrieu and Cartellier.

59. George III., 1817. Mudie's National Series, reverse of No. 1.
60. Return of Napoleon, 1815. No. 32 of Mudie's Series, reverse.
61. The British Army in the Netherlands, 1815. Obverse of No. 33 of Mudie's Series.
62. Charge of the British at Waterloo, 1815. Reverse of No. 34 of Mudie's Series.
63. The Ionian Islands, 1817 ; constitution given by England. No. 40 of Mudie's Series, reverse.
64. English Attack on Antwerp, 1809.

Obr.—Female figure, representing Antwerp, with tur-
eted crown, holding spear and caduceus and resting left foot on a prow. In the field three towers, surmounted by a hand (Arms of the City of Antwerp). In exergue, ANVERS AT-
TAQUÉE PAR LES ANGLAIS MDCCCLIX.
Signed DENON . D . DEPAULIS . F .

Rev.—JUPITER STATOR. Jupiter enthroned facing (Jupiter Stator is an allusion to the rallying of the French Army at the battle of Essling, or to Napoleon remaining himself at Schoenbrunn and directing affairs from there). In exergue, NAPOLEON A SCHOENBRÜNN MDCCCOIX.
Signed DENON . D . DOMARD . F .

1·6; struck; AE, &c. Millin, Pl. XLIV., 241. *Trésor*, Pl. XXXIII., 4.

This medal was probably executed after the revolution of 1830, when a reactionary admiration for Napoleon set in.

64A. The taking of Sebastopol, 1855.

Obv.—NAPOLEON III EMPEREUR. His bare head to left. Signed DEPAULIS F.

Rev.—NON HAEC SINE NUMINE DIVUM EVENTIUNT. Winged Victory to left, armed and helmeted, holding a thunderbolt in her left hand, with her right plants a French standard on the ruins of a fort. She places a foot on a dismounted cannon, near which lie projectiles and a Russian helmet. In the background are the town and port of Sebastopol. In exergue, PRISE DE SÉBASTOPOL VIII ET IX SEPTEMBRE MDCCCLV. Signed DEPAULIS INV. ET F.

2·95; struck; Æ (F.P.W.).

DESBOUEFS, Antoine, French sculptor, medallist, and gem engraver (1793—1862). Pupil of Cartellier and Jeuffroy.

65. Shakespeare, Memorial Medal (1818?). *Med. Illust.*, vol. i. p. 211, No. 50.

66. George IV. 1821.

Obv.—GEORGIUS IV. D. G. BRITANNIARUM REX F. D. His laureate head to left. Signed DESBOUEFS.

Rev.—The king seated to left holding sceptre in left hand and placing his right hand on the BIBLE. He is crowned by Commerce. Signed, DESBOUEFS. In exergue, MENS. JUL. DIE XIX. ANN. MDCCXXXI.

2; struck; Æ (M.B.).

Perhaps the following medals, signed A. D., are by Desboeufs:—

67. Queen Caroline on her trial, 1820.

Obv.—CAROLINE QUEEN OF ENGLAND. Her bust to left. Signed on the truncation A. D.

Rev.—Britannia (or Minerva) holding tablet inscribed

QUEEN'S TRIAL and dismissing Discord.
In exergue, MDCCCXX.

3·25 ; struck ; Æ (M.B.). This medal, in the Hamilton sale catalogue for May 3, 1882, is given to Aug. Dupré.

68. Lord Exmouth, 1816, created Viscount after his bombardment of Algiers.

Obv.—ED . PELLEW EQUES VICE COMES EX-MOUTH. His head to right. Signed on truncation, AD. .

Rev.—Inscription, SOCIETAS AD PIRATAS DE-LENDOS, &c.

2·2 ; struck ; Æ (M.B.). Platinum (Vienna coll.), *Num. Chron.*, 1891, p. 84, No. 2.

Edward Pellew, born 1757, distinguished himself in the American and French wars. He was made an admiral in 1804, and Baron Exmouth in 1814. After his bombardment of Algiers and subjugation of the Dey, he was created viscount and received the thanks of Parliament. He died in 1833. The Society for the Suppression of Piracy and for the Liberation of Christian Slaves was formed in Paris in 1814, chiefly by the exertions of Sir Sidney Smith. This medal was therefore probably struck in Paris.

DOMARD, Joseph François, French medallist (1792—1858).

Pupil of Cartellier and Jeuffroy. His portrait of King Louis-Philippe on the coins was much esteemed.

69. English Attack on Antwerp, 1809. See description under Medal No. 64.

70. International Exhibition at London, 1851. Council Medal.

Obv.—VICTORIA . D . G . BRIT . REG . F . D .
ALBERTUS PRINCEPS CONJUX .
MDCCCLI. Jugate busts to left of Queen

Victoria and the Prince Consort. Below, two dolphins; behind, trident. Signed W. WYON R.A., ROYAL MINT.

Rev.—EST ETIAM IN MAGNO QVAEDAM REPUBLICA MUNDO. MDCCCL. A female figure wearing mural crown, standing facing on a platform, crowns with garlands a male and female who join hands before her. The male figure is Mercury, to represent Commerce; the female probably represents Industry. Behind are trophy of flags and emblems of Commerce and Industry. The ground on which the figures are, is represented bordered by a conventional pattern of waves to express the Island Kingdom. Signed H. BONNARDEL INV. DOMARD SCULP. The recipient's name is stamped on edge.

3·6; struck; AE (South Kens. Mus.).

Domard was chosen, in 1850, to make this medal.

71. Visit of Louis-Philippe to Windsor, 1844.

Obv.—LOUIS PHILIPPE I ROI DES FRANÇAIS. Head of King crowned with oak and olive leaves to right. Signed DOMARD F.

Rev.—Inscription.

1·0; struck; AE (M.B.).

DONADIO, or DONNADIO, an Italian medallist, who worked for Mudie's Series of National Medals, for Durand's series, and for the "Galerie Métallique des grands hommes Français."

72. Francis Henry Egerton, Earl of Bridgewater. (Grueber, *Num. Chron.*, 1888, p. 87.) This medal is signed DONADIO F.

73. Portrait of the Duke of Wellington. Signed DONNADIO F. This forms the obverse of Mudie's Series, Nos. 16 and 22, though the obverses figured in Mudie's book are signed MILLS F. (See specimens in the British Museum.)

DROZ, Jean-Pierre. A pupil of Du Vivier. Born at Chaux-de-Fond, 1746; died at Paris, 1823; naturalised Frenchman. He made some beautiful pattern coins for Louis XVI.; worked for Boulton at the Soho works, Birmingham, 1790—1801. On his return to Paris he was made, in 1802, "Administrateur des Monnaies et Médailles," and in 1803 "Conservateur du Musée Monétaire," which appointment he kept till 1814. During this period he made the beautiful medal on the peace of Amiens, 1802, and the pattern five-franc piece for Napoleon's general, Berthier, as Prince of Neuchâtel. His son, the sculptor, Jules Antoine Droz, did not, I think, work in medals. There are several pattern coins made by Droz at the Soho mint and some beautiful English medals, but these mostly belong to the end of the eighteenth century. The following are specimens of his nineteenth century work relating to England:—

74. Settlement of the British at Bombay, 1662. Mudie's National Series. Obverse of No. 2.
75. Lord Nelson's Victories—Trafalgar, 1805. Reverse of No. 6 of Mudie's Series.
76. Capitulation of Pampeluna, 1813. Reverse of No. 25 of Mudie's National Series.
77. Peace of Paris, 1814. Reverse of No. 27 of Mudie's National Series.
78. Peace of Lunéville, 1801. Napoleonic Medal.

Obv.—BONAPARTE PR. CONSUL DE LA REP. FRAN. His bust to left. Signed J. P. DROZ F. AN. IX. 1801.

Rev.—BONHEUR AU CONTINENT. A globe with ANGLETERRE covered by a cloud and FRANCE covered with laurel. The sun shining on the French side. In exergue, PAIX DE LUNEVILLE AN IX. 1801.

2·2; struck; *AR*, &c. (Millin, Pl. XI. 42. *Trésor*, Pl. LXXXII., No. 3 of the volume of medals of the first Revolution.)

79. Construction of the fleet for Napoleon's projected invasion of England, 1804.

Obv.—NAPOLEON EMPEREUR. His laureate bust to right. Signed J. P. DROZ F.

Rev. EN L'AN XII 2,000 BARQUES SONT CONSTRUITES. Hercules binding the British lioness. Signed, in exergue, DENON DIREXIT, 1804.

1·6; struck; *AE*, &c. (Millin, Pl. XXX. 81; *Trésor*, Pl. II. No. 7.)

This reverse occurs also with reverse of No. 113 (*Trésor*, Pl. II., 8). The same reverse type, but with a different legend, occurs also on an unsigned medal (*Trésor*, Pl. II., 6).

80. For another obverse by Droz, dated 1806, see Nos. 29 and 115.

DUBOIS, Alphée, French medallist, son of the medallist Joseph Eugène Dubois. Born at Paris, 1831; pupil of Barre père and Duret; obtained the *prix de Rome* for a gem engraving in 1855. Amongst his medals may be mentioned those of Becquerel père; Prof. Pasteur, 1881; the comparative anatomist, Milne Edwards, 1880; the astronomer, J. J. Le Verrier, 1884, &c. The signatures of other Dubois must be distinguished. His father generally signed his medals E. DUBOIS, as in the medal of the Duke de Bordeaux and Duchesse de Berri, 1827 (Salon of that year). His son, Henri Dubois, signs his medals in full, or H. DUBOIS. Henri Dubois has made several medals, amongst others that of the "Ligue des Patriotes,"

suppressed¹⁹ by the Government, in 1888, for political reasons, but he has made none relating to England. A medal by the archaeologist and draughtsman, L. J. J. Dubois, on the battle of the Pyramids, is signed J. J. DUBOIS, F. Besides these there is the contemporary medallist of Belgium, who signs himself FERNAND DU BOIS,²⁰ and the signature P. DUBOIS Sc. appears on a Belgian medal of E. and A. Solway, 1886.

Of Alphée Dubois the following medals are in the English series:—

81. Discovery of the Solar Atmosphere, 1868.

Obv.—P. C. JULES JANSSEN . J. NORMAN LOCKYER. The conjoined heads of these two astronomers to right. Two small laurel branches below. Signed ALPHÉE DUBOIS.

Rev.—ANALYSE DES PROTUBERANCES SOLAIRES. 18 AOÛT. 1868. Apollo with radiate head standing in his four-horse chariot over clouds. With his right hand he points to the sun with protuberances on it. Signed ALPHÉE DUBOIS.

2·3; struck; Æ (M.B.). Figured. Pl. XVII.

There are large cast bronze medallions of the obverse and reverse types (diam. 8·6 ins.), like those cast in steel, from which the convex dies were made for the above medal.

¹⁹ The issue of the medals was stopped when the "Ligue" was suppressed. Medals have probably often been of some political importance, but mostly before the development of newspapers; notably some of the old Dutch medals, such as that of Christopher Adolfszoon, on the peace of Breda, 1667. (*Med. Illust.*, vol. i., p. 528—176.)

²⁰ See Nos. 84A and 84B, and *Rev. Belge de Num.*, 1891—1893, plates.

The astronomers Janssen and Lockyer, working independently, published simultaneously results from their observations of the solar eclipse of 18th August, 1868. The French "Administration des Monnaies et Médailles" therefore ordered the above commemorative medal, and commissioned the artist Alphée Dubois to come to England, in order to get Lockyer's portrait. The medal was not finished until after the Franco-German war.

82. The Montefiore Bronze Prize Medal of the Army Medical School. Netley, 1881.

Obv. — EX DONIS . N . MONTEFIORE F.R.C.S.
SCHOL . MIL . MED . 1881. Arms and crest
with motto, THINK AND THANK.

Rev. — ΙΗΤΡΟΣ ΓΑΡ ΑΝΗΡ ΠΟΛΛΩΝ ΑΝΤΑΞΙΟΣ
ΑΛΛΩΝ. Ambulance Scene. An Army surgeon
kneeling bandages the leg of a wounded soldier
seated on a stretcher. In the background, on
the left, is an ambulance wagon, on the right
two soldiers are carrying another wounded man
on a stretcher. Hilly landscape in the distance.
The kneeling surgeon is from a portrait of Sir
Thomas Longmore, of Netley, an old friend and
fellow-student of Mr. Montefiore.

2·4; struck: Æ (F.P.W.). Described by Dr. H. Storer
in the *Sanitarian*, U.S.A., May, 1890.

A leading firm of English medallists declared the designs unsuited for medallic effect, after which the commission was entrusted to M. Dubois. This medal is awarded, in bronze, with a prize of twenty guineas, to the surgeon on probation who evinces the highest proficiency in military surgery. Mr. Nathaniel Montefiore, F.R.C.S., was the founder of the prize and medal, which were first awarded in February, 1882.

83. Dr. Hermann Weber, of London, 1893.

Obv.—HERMANN WEBER, M.D., F.R.C.P., LONDON.

His bust facing, slightly inclined to right.
Signed ALPHÉE DUBOIS, 1893.

No reverse. Portrait medallion, 5·75 inches diam., cast in bronze. Signed on the back by the founder, "E. GRUET J^{NR} Fondeur Paris."

84. *Obv.*—The same, reduced from No. 83 with the reducing machine and slightly worked again by the artist.

Rev.—A bee-hive; below which is the Aesculapian staff and the inscription ÆTATIS SVÆ LXX. The whole within a circle of children and flowers.
Signed F. BOWCHER . F .

1·1; *AR.* (F.P.W.).

The reverse of this medal is by the sculptor and medal-list Frank Bowcher, of London. With the obverse I have the opportunity of pointing out the various stages usual in the making of many modern medals. Here is the preliminary model in red modelling wax²¹ on slate. In this particular specimen the slate is marked out in squares, so as to make the exact scale certain. From this a cast in plaster is taken, which is worked over, and serves as the final artist's model. From the plaster the bronze casts²² are taken by the expert founders, and should require no further "touching up" by the artist. If a struck medal be required, a cast in steel is made from the plaster model, and from this the convex dies, in soft steel, are produced by the reducing machine, in the same way as the little silver obverse just described was made. These convex dies may require touching up by the artist,

²¹ Some artists prefer modelling clay.

²² The moulds are made of the fine yellow clay (quarried at Fontenay, near Paris) which is exported for art casting to many foreign countries.

are then hardened, and serve to punch out the concave dies for striking the medals.

Some time ago I exhibited specimens by the medallist Jauner, of Vienna, illustrating a variety of the above method. He made his model of the same size as the medal required; from this he made a steel casting, which he then worked over, and which, when hardened, served as the convex die to punch out his concave dies used for striking the medals.

DU BOIS, FERNAND, contemporary Belgian medallist.

84A. Numismatic and Antiquarian Society of Montreal; the Hon. Justice Baby, president, 1887.

Obv.—HON. JUSTICE L. F. G. BABY. PRESIDENT. 1887. His bust to right. Signed FERNAND DUBOIS.

Rev.—NUMISMATIC AND ANTIQVARIAN SOCIETY MONTREAL FOUNDED. DEC. 15TH. 1862. TWENTY-FIFTH ANNIVERSARY. Arms of the Society. Signed FERNAND DUBOIS.

2·25; struck. Figured in Leroux, *Le Médailleur du Canada*, p. 264, 1811.

84B. Numismatic and Antiquarian Society of Montreal, *jeton de présence*, 1887.

Obv.—As reverse of No. 84A.

Rev.—JETON DE PRESENCE AT THE NATUREL (sic!) HISTORY SOCIETY'S ROOMS MONTREAL DEC. XVTH. MDCCCLXXXVII. S-like scroll with two bees. Signed FERNAND DUBOIS.

1·35; struck. Figured in Leroux, *Le Médailleur du Canada*, p. 264, 1812.

DUBOIS, French medallist, employed by Mudie. He signs himself DUBOIS, F., without initials, both on Napo-

leonic medals and those of Mudie's series. Was this the medallist Etienne-Jacques Dubois, who obtained the second grand prix for Rome in 1809, or was it J. J. Dubois, who made a medal on the battle of the Pyramids; or was it Joseph Eugène Dubois,²³ who made the medal of the Duchesse de Berri and her son, in 1827? The latter medallist was born in 1796, and studied under Bridan and Droz; he became blind in 1846 and died in 1863. Besides the medal of the Duchesse de Berri, signed E. DUBOIS, F., he made medals of his master J. P. Droz and of the Baron de Puymaurin, Director of the medallic mint at Paris.

The following medals are signed DUBOIS without initials:—

85. Scottish Valour in the Napoleonic Wars. Mudie's National Series, obverse of No. 10.
86. Passage of the Douro, 1809. Mudie's National Series, reverse of No. 15.
87. The English Army on the Tagus, 1810—11. Mudie's National Series, reverse of No. 17.
88. The Peace of Paris, 1814. Mudie's National Series, reverse of No. 28.

DUPRÉ, Augustin (1748—1833), French medallist, "Graveur Général des Monnaies." Well known for his coins of the first French Republic. In the Salon, 1802, was a model for a medal on the peace of Amiens, and for other medals of the nineteenth century see Millin, Pl. XXVI., No. 62. The medal on Queen

²³ See the Dictionary of French artists by Bellier de Chavignerie and L. Auvray.

Caroline's trial (medal No. 67), signed A. D., was assigned to him in the Hamilton sale catalogue, 3rd May, 1882 (lot 401), and the medal of Lord Exmouth (No. 68) might possibly be his work. Of the last century we have his medal commemorating Paul Jones' exploits on the coast of Scotland, 1779 (Grueber, *Guide to English Medals*, 1881, p. 115, 522), and the medal of Benjamin Franklin, 1786 (Grueber's *Guide*, p. 130, 567); but of the present century the following is the only medal relating to England which I have seen, and which, I think, may be assigned to him. It is one of Mudie's series, for which very many French medallists were employed.

89. Egypt delivered, 1801. Mudie's National Series, No. 9, reverse. It is signed DUPRES F.

DURAND, Amédée, was the "éditeur" who brought out the "Series numismatica universalis virorum illustrium," but the following medals are signed DURAND, F. and not DURAND EDIDIT.

90. George IV. on his Coronation, 1820.

Obv.—GEORGIUS III. D . G . BRITANNIARUM REX F.D. His laureate head to right. Signed DURAND F.

Rev.—NATUS VINDONE AN . M.DCC.LXII REGNI ADMINISTER AN . M.DCCO.XI. MAGN . BRITAN . REX AN . M.DCCO.XX.

1·6 ; struck ; Æ (M.B.).

91. George IV. on his death, 1830.

Obv.—Similar to preceding obverse, but the head has whiskers, and artist's signature is in bigger letters.

Rev.—Inscription GEORGE 4TH BORN 12TH AUGUST 1762 DIED 26TH JUNE 1830 — BY HIS FAITHFUL SUBJECTS ON THE CONTINENT IN TESTIMONY OF THEIR SORROW — PARIS 1830.

1·65; struck; Æ (M.B.).

EBERLEIN, Gustav, modern German sculptor of Berlin.

92. The Crown-Prince Frederick (afterwards Emperor), and Victoria, Princess Royal of England, on their Silver Wedding, 1883.

Obv.—VICTORIA . FRIEDRICH WILHELM . 1858 . 25 . LAN . 1883. Their heads conjoined to left with oak crown.

Rev.—Victory facing between arms of the Crown-Prince and of the Crown-Princess as Princess Royal of England. Signed "G. Eberlein fec."

3·65; cast; Æ (Baron Schroeder). Figured. Pl. XVII.

This specimen was presented by the Emperor Frederick to its present owner, Baron Schroeder.

EMPTMEYER, Clemens, of Vienna, contemporary medal-list. He worked with the Wyons in London about 1880—1887. He was employed for the following medal at the recommendation of the late Sir Edgar Boehm.

92A. Royal Jubilee decoration in memory of the fiftieth year of Queen Victoria's reign, 1887.

Obv.—VICTORIA D . G . REGINA ET IMPERATRIX F . D . Her bust after Sir Edgar Boehm to left. C. EMPTMEYER.

Rev.—Inscription within open wreath and surmounted by a crown: IN COMMEMORATION OF THE 50TH YEAR OF THE REIGN OF QUEEN VICTORIA 21 . JUNE . 1887.

1·2; struck with loop for suspension; N , R , Æ .

This medal is worn with a ribbon, dark blue with two light blue stripes. It was given, in gold, to members of the royal family and to royal visitors who were present; in silver, to Ministers of State and other dignitaries; and in bronze to the royal servants.

FISCH, Ant., contemporary medallist, living at Brussels.

92a. London International Exhibition at the Crystal Palace, 1884. Prize medal. One of the reverses used for this medal is signed by A. Fisch. The obverse is by Pinches of London.

GALLE, André, French medallist (1761—1844). He had taught himself, but in 1794 entered the studio of the sculptor Chaudet. His head of "Liberty," on the "métal de cloche" medals, 1792, is of very delicate workmanship.

93. Memorial of Matthew Boulton, 1809.

(Grueber, *Num. Chron.*, 1888, p. 87, No. 8.)

94. Memorial of the statesman Canning, 1827.

(Grueber, *Num. Chron.*, 1888, p. 271, No. 8.) Obverse figured. Pl. XVII.

95. Memorial of James Watt.

Obv.—JAMES WATT. His clothed bust to left. Signed GALLE, F.

No reverse.

2·3; struck; white medal (M.B.).

96. Henry Grattan, the Irish statesman (died 1820).

Memorial Medal described by Grueber, *Num. Chron.*, 1891, p. 393, 2.

GATTEAUX, Nicolas Marie, père (1751—1832), French medallist, pupil of Delorme and Gros. "Graveur des

médailles du roi" in 1781. Of his son Jacques Edouard Gatteaux there are no medals relating to England.

97. Re-establishment of the British Roman Catholic College in Paris (1802 ?)

Obv.—NAPOLEO SUOS REGENS EXTERIS PRO-
VIDET. Bust of Napoleon, laureate, to right.
Signed GATTEAUX.

Rev.—HIBERNI ANGLI SCOTI PRO FIDE ET
LITTERIS IN GALLIA HOSPITES. Sham-
rock below legend.

1·25; struck; AR (M.B.). (Millin, Pl. XXVII., 66.
Trésor, Pl. VI., Nos. 1 and 2). There are two
varieties. A similar medal by Andrieu is
described under No. 2.

GAYRARD, Raymond, French medallist and sculptor (1777—1858). Pupil of Boizot, Taunay, and Geof-
froy. His son Joseph Raymond P. Gayrard is a
sculptor of Paris.

98. The bridge at Almarez, 1812. Mudie's National Series,
No. 20, reverse.

99. Roger Bacon. Memorial Medal in Durand's Series.
(*Med. Illust.*, vol. i., p. 4, 1.)

100. Naval Engagement off Malaga, 1704. Medal struck
about 1820 for the Comte d'Artois (afterwards
King Charles X.), in honour of the Comte de
Toulouse, natural son of Louis XIV. (*Med.
Illust.*, vol. ii., p. 268, 68.)

101. The French people to the English nation, 1830. Medal
by Gayrard and Caqué. See description under
No. 38.

GEEFS, Alexander (1829—1866), Belgian medallist. He
was a pupil of Braemt, the engraver to the mint at
Brussels.

101A. Sir Robert Peel, memorial medal, 1856.

Obv.—R^T PEEL . TURGOT. Jugate busts to left of Sir Robert Peel and Turgot, the French statesman under Louis XVI. Signed ALEX . GEEFS . F.

Rev.—Inscription within a wreath:—CONGRÈS INTERNATIONAL DES REFORMES DOUANIÈRES . BRUXELLES 22 . 23 . 24 . SEPTEMBRE 1856.

101B. International Exhibition at Dublin, 1865. Prize medal.

Obv.—ARTS AND MANUFACTURES. A winged female figure with cornucopie is flying to left. The sun is rising over a calm sea and on the left is seen the façade of a Greek temple with a group of emblems, signifying the arts, industries, and commerce. In the exergue: ALEX . GEEFS INV . & FECIT . BRUSSELS.

Rev.—DUBLIN INTERNATIONAL EXHIBITION, 1865. A wreath with the recipient's name engraved within. The wreath is open at the top and the space is filled up by a crowned harp between roses and thistles; below the wreath is a shamrock-leaf between two stars; there are ribbons on the wreath, inscribed with the names of the four continents.

2·9; struck in various metals.

GEERTS, Ed., medallist of Brussels.

101C. National Health Society, London.

Obv.—NATIONAL HEALTH SOCIETY, HYGEIA. Head of Hygeia to left. Signed ED . GEERTS F . T . W . CUTLER INV. The whole in ornamental border.

Rev.—Inscription within laurel-wreath: AWARDED TO. Space is left for recipient's name.

Heart-shaped, 2·45 x 2·25; struck; Æ .

The National Health Society was founded in 1872. Its objects are to diffuse sanitary knowledge amongst all

classes, and to organize lectures, &c., in connection with this purpose. The medal of the Society is awarded to candidates by examination. The heart-shaped medal was designed by Mr. Thomas Cutler and executed in Brussels. It was used in 1883, but since then has been replaced by another medal of English manufacture.

GERARD, a medallist employed in Mudie's National Series of Medals.

102. Algiers bombarded by Lord Exmouth, 1816. Mudie's National Series, No. 39, reverse.

GRANDE, R. See ADDENDA.

HART, Laurent-Joseph, Belgian medallist. Born at Antwerp, 1810; died at Brussels, 1860. His large medals, decorative, and with bold portraiture, are well known.

103—107. Queen Victoria's visit to Belgium, 1843.

Obv.—VICTORIA REINE D'ANGLETERRE. Crowned bust of Queen to left. Signed VERACHTER DIR. HART FECIT.

Rev.—DÉBARQUEMENT DE LA REINE — OSTENDE 13 SEPTEMBRE 1843. Arms of Ostend within ornamental inner circle.

2·15; struck; Æ (M.B.).

There are three other medals with the same obverse, but with reverses commemorating respectively the visit of the Queen to Bruges, 15th September; to Ghent, 16th September; to Brussels, 18th September. That of the embarkation of the Queen at Antwerp, 20th September, has her head on obverse, without crown, and with rose, thistle, and shamrock below. (Æ , all in M.B.)

108. Crimean War, 1854.

Obv.—NAPOLEON VICTORIA. Heads conjoined to left of Napoleon III. crowned with oak, and Queen Victoria, crowned with laurels; very high relief. Signed HART FECIT.

Rev.—À LA GLOIRE DES ARMÉES ALLIÉES. ALMA 20 SEPT. BALAKLAVA 25 OCT. INKERMANN 5 NOV. Trophy of arms. In exergue, 1854.

2·9; struck; AE (F.P.W.). Obverse figured. Pl. XVII.

HELFRICHT, Friedrich Ferdinand (1809—1892), Court Medallist of Gotha. His talent for medallio work showed itself in early life, and his medal of the Gotha statesman, Lindenau, attracted the attention of Duke Ernest I. of Saxe-Coburg Gotha, by whose aid he was able to study at the Berlin academy. There, under the sculptor Schadow, his love for the antique was developed, and this taste is well shown in his marriage medal of Duke Ernest II. of Saxe-Coburg Gotha (1842), one of his finest medals. The medal on the golden wedding of Duke Ernest II. (1892) is Helfricht's last medal, the reverse of which is by his son, Emil Helfricht, now a medallist in London. The latter has made a medal of Bayard Taylor, the Ameriean author, and translator of *Faust*, on his death at Berlin in 1878, but I know of no signed medals by him relating to England. Many of Ferd. Helfriecht's medals may be seen at the South Kensington Museum. For further information, see the biographical sketch by Dr. R. Hodermann (*General-Anzeiger*, Gotha, 1893).

109. Marriage of Queen Victoria with Prince Albert of Coburg-Gotha, 1840.

Obv.—VICTORIA REGINA MAGNAE BRITANNIAE

ALBERTUS DUX SAXONIAE. Busts conjoined of Queen Victoria and Prince Albert to left. Signed HELFRICHT F.

Rev.—FELICES QUOS JUNGIT AMOR. DIE X. M. FEBRUARII MDCCCXL. The Queen and Prince Albert in classical dress, seated in a Roman chariot drawn by two Cupids to right. Two smaller Cupids fly above and crown the pair with garlands.

1·8; struck; Æ (South Kens. Mus., F.P.W.). Figured. Pl. XVII.

110. Visit of Queen Victoria and the Prince Consort to Ohrdruf, 1845.

Obv.—ALBERTVS. VICTORIA. MENSE AVGVSTO MDCCCOXXXV. Their jugate heads, bare, to left. Signed HELFRICHT F.

Rev.—Inscription: CONIVGES AVGVSTISSIMOS AGRVM DITIONI PRINCIPVM HOHEN-LOHENSIVM COMITVM GLEICHENSIVM SVBIECTVM TRANSEVNTES IVSTA CVM VENERATIONE PROSEQVITVR CIVITAS OHRDRVFFIENSIS.

1·55; struck; Æ (South Kens. Mus., F.P.W.).

JALEY, Louis, père (1763—1838), French medallist, pupil of Moitte and Aug. Dupré.

111. Napoleon's "Armée d'Angleterre" at Boulogne, 1804.

Obv.—SERMENT. DE. L'ARMÉE. D'ANGLETERRE A EMPEREUR NAPOLEON &c. Plan of the army. Signed JALEY F.

Rev.—HONNEUR LÉGIONAIRE AUX BRAVES DE L'ARMÉE. Napoleon seated on platform distributing the legion of honour to soldiers. In exergue, A BOULOGNE LE XXVIII THERM. AN XII. XVI AOUT MDCCCIV. Signed DENON D. JEUFFROY F.

1·6; struck; Æ (Salon, 1806; Millin, Pl. XXXI., 80; Tréor, Pl. I., 14.)

JÉHOTTE, Constant, Belgian medallist. Born 1805; the son of Léonard Jéhotte, engraver, medallist, and gem engraver (1772—1851).

112. J. Cockerill, memorial medal, 1847.

Obv.—JOHN COCKERILL. His clothed bust to right. Signed C. JÉHOTTE F. 1847.

Rev.—NÉ A HASLINGDEN EN 1790 MORT A VARSOVIE EN 1840. In the centre, SERAING.

2·0; struck; Æ (F.P.W.). Obverse figured. Pl. XVII.

John Cockerill, the industrial engineer, was born at Haslingden, in Lancashire, in 1790. In 1816 he founded the immense manufactories of Seraing, near Liège, in which 2,000 workmen found employment. The works belonged jointly to him and to William I., King of the Netherlands, down to the revolution of 1830, when he purchased the king's share. He died at Warsaw in 1840, and is regarded as the maker of the industrial town of Seraing, containing now 31,000 inhabitants.

JEUFFROY, Romain Vincent (1749—1826), French gem-engraver and medallist, Membre de l'Institut.

113. "Treaty of Amiens broken by England" in May 1803, and French occupation of Hanover. Napoleonic medal.

Obv.—LE TRAITÉ D'AMIENS ROMPU PAR L'ANGLETERRE EN MAI DE L'AN 1803. The British lioness tearing a treaty with her teeth. Signed DENON DIREXIT JEUFFROY FECIT.

Rev.—L'HANOVRE OCCUPÉ PAR L'ARMÉE FRANÇAISE EN JUIN DE L'AN 1803. Winged Victory, holding garland, on horseback galloping to right. In exergue, FRAPPÉE AVEC L'ARGENT DES MINES D'HANOVRE L'AN 4 DE BONAPARTE.

1·65; struck; Æ . (Exhibited at the Salon of 1804; Millin, Pl. XXX., 69; *Trésor*, Pl. XCIV., 7, of the volume on medals of the first French Revolution.)

This reverse occurs also with that of No. 79 (*Trésor*, Pl. II., 8).

114. Napoleon's threatened invasion of England, 1804. (Napoleonic Medal).

Obr.—His laureate head to right. Signed JEUFFROY FECIT DENON DIREXIT.

Rev.—DESCENTE EN ANGLETERRE. Heroic male figure (for Napoleon), overturning a Titon-like monster (to represent England). In exergue, FRAPPÉE A LONDRES EN 1804.

1·6; struck; Æ . (Millin, Pl. XXXVI., 126, and *Trésor*, Pl. V., 1).

The fact that the dies for this medal were prepared in advance, shows that Napoleon did really intend to invade England. Only one specimen in metal (lead) was known to the author of the description in the *Trésor*. The British Museum possesses an electrotype.

115. Blockade of the British Isles, 1806. Napoleonic Medal for which the reverse dies of the preceding medal were altered.

Obr.—NAPOLEON EMP. ET ROI. His laureate head to right. Signed DROZ FECIT DENON DIREXI(t) MDCCCVI.

Rev.—As reverse of No. 114, but the legend has been altered to TOTO DIVISOS ORBE BRITANNOS, and the signature DENON DI. JEUFFR. FE. 1806, takes the place of the FRAPPÉE A LONDRES EN 1804 of preceding medal.

1·6; struck; Æ . &c. (Millin, Pl. XXXVI., 127; *Trésor*, Pl. XIV., 17).

In my specimen, and probably all others, remains of the two last E's of DESCENTE can still distinctly be made out, after the last O in TOTO, and after the V in DIVISOS. This proves that reverse dies of No. 114 were really altered and used for No. 115. The dies were brought to England, and the medals were mostly struck there subsequently.

116. Mudie afterwards issued a medal with a copy of the interesting reverse of No. 114, but reading FRAPPE instead of FRAPPÉE. For the obverse he apparently used an old die, almost the same as Droz's obverse of No. 115, having the date erased by a stroke. The obverse die may, like the reverse one, have been a copy, but as Droz was employed by Mudie it seems not improbable that it was a genuine die of Droz touched up. On the edge: COPIED FROM THE FRENCH MEDAL.

Most of these pieces have the inscription on the edge, stating them to be copies, but some are without it.

117. Napoleon's "Armée d'Angleterre" at Boulogne, 1804.
See medal No. 111.

JOUVENEL, Adolphe-Christian. See ADDENDA.

KÄSELER, G. (of Brunswick?).

117A. The Brunswick War Medal for Waterloo and Quatrebras, 1815.

Obv.—"Friedrich Wilhelm Herzog." Bust of the Duke of Brunswick to left. Signed "G. Käseler."

Rev.—"Braunschweig seinen Kriegern. Quatrebras und Waterloo." "1815" in wreath of laurel and oak.

1·4; struck; $\mathcal{A}.$ with iron loop for suspension.

KÜCHLER, C. H. A native of Flanders, who was employed by Boulton at the Soho mint at Birmingham. He

also made medals for foreign countries. His medals date from 1790 to 1805. Amongst his medals made in this century are the following relating to England :—

118. Attempted assassination of King George III., 1800. (Grueber's *Guide to English Medals*, p. 121—540.)
119. Union with Ireland, 1801. (Grueber, *op. cit.*, p. 121, 541).
120. Same obverse with reverse :—Arms of the Hudson's Bay Company. AR (M.B.). AE (R. W. MacLachlan's *Canadian Numismatics*, No. CCCXXXII).

This medal is figured in Leroux's *Le Médailleur du Canada*, p. 59. It was more probably presented to members of the Hudson's Bay Company in London than, as suggested by MacLachlan, to Indian chiefs.

121. Same obverse, but reverse, has an inscription on the king's death, 1826.
122. Boulton's Medal given to officers and seamen engaged at Trafalgar, 1805. (Grueber, *op. cit.*, p. 122, 544.) Figured by Tancred, p. 68.
123. National Edition of Shakespeare's Works, published 1803. (*Med. Illust.*, vol. i., p. 209—45.)
124. Peace of Amiens, 1802. AE. (M.B.).
125. Drayton Agricultural Society instituted, 1800. (M.B.).
126. Lord St. Vincent's Medal, 1800, presented by him to petty officers and seamen of the flagship, "Ville de Paris," as a token of their loyalty. AR. (M.B.). Figured by Tancred, p. 63.

KULLRICH, Wilhelm, German medallist. He worked at the medallistic establishment of G. Loos, at Berlin, and at one time with William Wyon, in London; was afterwards Court Medallist at Berlin. Died 1887.

127. Peace of Paris, 1856, after the Crimean War.

Obv.—Europe seated to left; on her shield is a representation of Europa on the bull; at her feet lie a dismantled cannon and a broken sword; a winged youth bearing cornucopiae offers her a palm-branch; above him a star. In a circle around this are arranged the profiles of the sovereigns of Europe: Queen Victoria, Victor Emmanuel II., of Sardinia, Alexander II. of Russia, Francis Joseph of Austria, Friedrich Wilhelm IV. of Prussia, the Sultan and Napoleon III. of France. Between the portraits are little genii with emblems of the various arts and industries. In an outer circle are the names and titles of the sovereigns represented.

Rev.—PAX CONCILIATA LUTETIAE PARISIORUM
D . XXX . MART . A . MDCCCLVI within
border ornamented with ivy. Signed G .
LOOS D . W . KULLRICH F . BEROLINI.

2·2; struck; Æ (M.B.). Obverse figured. Pl. XVII.

128. Marriage of the Princess Royal of England with the Crown-Prince of Prussia (afterwards the Emperor Frederick), 1858.

Obv.—D . XXV JANVARII MDCCCLVIII. An angel facing holds up two medallions with profile heads of the bride and bridegroom facing; below, the lion of England and the Prussian eagle. Signed G . LOOS . DIR . W . KULLRICH FEC.

Rev.—SALVE. An allegorical representation; the royal pair accompanied by Saint George and Hymen are received on their arrival in Germany by Minerva. Signed A . FISCHER INV.

2·1; struck; Æ (M.B.).

128A. New South Wales Industrial Exhibition, 1862. Prize medal.

Obv.—NEW SOUTH WALES TO THE PRIZE EXHIBITORS 1862. Female head to left, her hair adorned with leaves and fruit of New South Wales. Signed W . KULLRICH F.

Rev.—HINC LAUDEM FORTES SPERATE COLONI.

Britannia with trident and shield, seated to left, holds a garland in her left hand; before her kneels a female figure, emptying a cornucopia; behind them are bales of merchandise, and in the background a building and the sea with a ship on it are seen. Signed in the exergue: W. KULLRICH INV. ET FECIT BERO-LINI.

3·0; struck; Æ (Royal Mint Mus.). On the edge are stamped recipient's name and the articles exhibited.

128B. Victoria, Crown-Princess. Sanatorium for Children, 1884. See description under WEIGAND, E.

LA FITTE. Worked for Mudie's National Series of English Medals.

129. Battle of Talavera, 1809. Mudie's National Series, No. 16, reverse.

130. The English Army upon the Scheldt, 1815. No. 33 of Mudie's National Series, reverse.

LAUER MEDALLIC ESTABLISHMENT, THE. The Lauer "Münz-Anstalt," at Nürnberg, dates from the eighteenth century, but vast improvements, both mechanical and artistic, were introduced by the late L. C. Lauer. Since his death (1873) the establishment has been managed by others of the family, and the following medals were made there:—

131. Mr. and Mrs. Gladstone on their Golden Wedding, 1889.

Obv.—THE RIGHT HON. M^{RS}. W. E. GLADSTONE M.P. AND M^{RS}. GLADSTONE. Their busts, Mrs. Gladstone facing and Mr. Gladstone three-quarters to left.

Rev.—IN COMMEMORATION OF THE GOLDEN WEDDING DAY JULY 25TH 1839—1889. The legend is within a circle formed of roses, ivy, and a serpent biting its tail. Above the

legend, two hands issuing from clouds clasp each other. Signed L. CHR. LAUER NÜRNBERG.

2·4; struck; *Æ.* Aluminium (F.P.W.). Obverse figured. Pl. XVII.

132. Henry Irving, the famous actor, 1891.

Obo.—His bust to left. Signed I.R.T. (for J. Rochelle Thomas, the issuer).

Rev.—HENRY IRVING 1891.

2·4; struck; *Æ.* Aluminium (F.P.W.). Obverse figured. Pl. XVII.

133. Lord Tennyson, poet laureate, 1892.

Obo.—His bust three-quarters left. Signed I.R.T. (for J. Rochelle Thomas, the issuer).

Rev.—TENNYSON.

2·4; struck; *Æ.* Aluminium (F.P.W.).

134—142. There are also medals of Queen Victoria's Jubilee of 1887, the Emperor Frederick and his wife (the Princess Royal of England) on their accession 1888, the Queen's seventieth birthday in 1889, the naval review and visit of the Emp. William II. in 1889, the visit of the Prince of Wales to Berlin in 1890, the Forth Bridge 1890, the Penny Postage Jubilee 1890, and the launching of H.M.S. Royal Sovereign and H.M.S. Royal Arthur 1891, the visit of the Emperor William II. and Empress to London in July of 1891:—see Lauer's lists and plates of medals.

LECLERCQ, J. See ADDENDA.

LEGROS, Alphonse, former Slade Professor of Fine Arts at University College, London. Born at Dijon, 1837. A picture of his may be seen in the Luxembourg Gallery, at Paris, and the museum of his native town contains a small collection of his etchings and medals. The following portrait medallions were all

made during 1881—1882, are all cast in bronze, and, unless stated, are without reverse:—

143. Charles Robert Darwin, 1881. His bust to left with name and date. Signed A. L. 4·5 (M.B.). (Grueber, *Num. Chron.*, 1890, p. 89.) Obverse figured. Pl. XVII. This was the first medallion made by Prof. Legros.

144. Thomas Carlyle (1881). His bust with broad-brimmed hat to left and his name without date or artist's signature. 4·4 (M.B.). (Grueber, *Num. Chron.*, 1888, page 277, 2.)

145. Alfred Tennyson, poet laureate (1881). His bust to left with name. Signed A. LEGROS. 4·7 (M.B.).

146. John Stuart Mill (1882). His bust to left with name. No artist's signature. 4·05 (M.B.).

147. W. E. Gladstone, 1882.
Obv.—His bust to right with name and date. No artist's signature.
Rev.—FIDE ET VIRTUTE. 4·45 (M.B.).

The following medallions are studies made in 1881 or 1882:—

148. Orlando Martorelli, 1881. Unsigned. 4·9 (M.B.).

149. Pierre Gregoire. Unsigned. 4·15 (M.B.).

150. Maria Valvona, 1881. Unsigned. 3·9 (M.B.).

151. Don Juan Heredia. Unsigned. 4 (M.B.).

152. Antonio Escoredo. Unsigned. 3·55 (M.B.).

153. Bust of a girl to right with long hair. No inscription. 2·9 (M.B.).

154. Male bearded bust to left, without name. Signed A. L. 3·8 (M.B.).

155. *Obv.*—“Giovanni Labresca.” Bust to left. Unsigned.
Rev.—“Donato Vidari.” Bust to left. Unsigned. 4·6 (M.B.).

LEFEVRE, a medallist, who worked for Mudie's National Series of Medals.

156. Battle of Vittoria, 1813. Mudie's National Series, No. 22, reverse.

LINDBERG, Adolf, contemporary medallist of Stockholm.

156A. Jenny Lind, the celebrated vocalist, on her death, 1887.

Obv.—JENNY LIND GOLDSCHMIDT FÖDD 6 OKT. 1820 DÖD 2. NOV. 1887. Her draped bust to left. Signed A. LINDBERG.

Rev.—ANDA. OCH. KONST. A winged female figure, half-draped, seated to right, inscribes a tablet; her foot rests on two books and a scroll; around her are an antique lamp, a lyre, and a laurel-branch. Signed ADOLF LINDBERG.

2·0; struck; AE (Royal Mint Mus.).

Jenny Lind, afterwards Madame Lind-Goldschmidt, the celebrated vocalist, was born at Stockholm 6 Oct., 1820. Her true name was Johanna Maria Lind. She came to England for the first time in 1847 and her singing created immense enthusiasm. In 1852 she married Mr. Otto Goldschmidt of Hamburg, on the naturalisation of whom in 1859 she became a British subject. After her retirement from the stage (in 1849) she appeared on various occasions in public and took a great interest in the Bach Choir founded in 1876. From 1883 to 1886 she was chief professor of singing at the Royal College of Music. She died at Malvern in 1887. A large number of institutions both in England and Sweden benefited by her charity.

LINDENSCHMIDT, Johann, German medallist. Born in 1770. Though brought up at first to be a gunsmith,

his father Wilhelm's trade, he soon found means to educate himself in drawing, engraving, &c., and worked as medallist, first in Mayence, and, after 1808, in Wiesbaden. Wilhelm Lindenschmidt, the historical painter, was his son.

156B. Nassau War-medal for Waterloo, 1815.

Obv.—FRIEDRICH AUGUST HERZOG ZU NASSAU.
Bare head of the Duke of Nassau to right.
Signed I. L.

Rev.—DEN NASSAUISCHEN STREITERN BEY
WATERLOO DEN 18 JUNI 1815. Victory
crowning a warrior in Roman dress.

1·15; struck with loop for suspension; *AR*.

Loos, Daniel Friedrich (1735—1819), German medallist, pupil of Johann Friedrich Stieler. Was chief Engraver and Medallist to the Court at Berlin.

157. The Duke of Wellington.

Obv.—WELLINGTON. His head with bare neck to left in laurel wreath. Signed LOOS.

Rev.—Arms of Wellington.

1·1; struck; *AR* (M.B.).

158. Wellington and Blücher at the Battle of Waterloo, 1815. Described by Grueber, *Num. Chron.*, 1888, p. 77, 8.

159. Memorial of Elizabeth of York, wife of King Henry VII. of England.

Medal made for Mr. Thane (*Med. Illust.*, vol. i., p. 22, 5.)

160. Great Britain and Prussia giving help to the Orango refugees, 1805.

Obv.—LA MÊME CHARITÉ LES ANIME, 1705.
Great Britain and Prussia standing receiving a man with wanderer's staff who kneels and implores their help. Great Britain holds up the plan of a building. Signed LOOS.

Rev.—LES ORANGEOS RÉFUGIÉS EN MEMOIRE
DES BIENFAITS DE LA GRANDE
BRETAGNE ET DE LA PRUSSE, 1805.
1·75; struck; *AR* (M.B.).

Loos, Friedrich, eldest son of Daniel F. Loos; worked with his father at Berlin, and did not long survive him.

161. Dr. Edward Jenner, the discoverer of vaccination. Two portrait medals bear the signature F. LOOS. See Duisburg's edition of Rudolphi, *op. cit.*, Nos. DCIX., 6 and 7.

Loos, Gottfried B. (1774—1843), the second son of Daniel F. Loos, was "münz-meister" at Berlin, 1806—1812. In 1812 he founded the well-known medallic establishment of Loos in Berlin.

For medals made at the medallic establishment under his direction, see Nos. 127, 128, 215.

LUNDERBERG, Lawrence, Swedish medallist, probably born in 1749. The date of his death is unknown, but his medals date from 1797 to 1810. (Information received from Prof. Hans Hildebrand of Stockholm).

162. Charles (afterwards Earl) Grey, M.P., 1801.

Obv.—CAROLVS GREY PARLIAMENTI BRITAN-
NICI MEMBRVM. Bust to left. Signed
"Lunderberg."

Rev.—Oaken wreath and inscription COSMOPOLITAE,
&c.

2·15; struck; *AR* (M.B.).

Charles, second Earl Grey, 1764—1845, is celebrated for the passing of the Parliamentary Reform Bill and the abolition of slavery in the British possessions.

F. PARKES WEBER.

(*To be continued.*)

NOTICES OF RECENT NUMISMATIC PUBLICATIONS.

Catalogue des monnaies grecques de la Bibliothèque Nationale. Les Peres Achéménides, les Satrapes et les Dynastes tributaires de leur Empire; Cypre et Phénicie. By E. Babelon. Paris, 1893.

This magnificent volume is a worthy successor to M. Babelon's former work, *Les Rois de Syrie*. It contains descriptions of no less than 2,962 coins of the series enumerated on the title page, including in addition several other classes of coins, such as the Imperial issues of Cyprus and Phoenicia, which might perhaps with advantage have been postponed to a future volume, as they seem rather out of place in a work mainly devoted to the coinage of the period before Alexander the Great. As, however, the author has thought fit to include the Imperial coins of these countries, we see no reason why he should not have divided his work into two volumes in order to include also the later autonomous and Imperial coins of Lycia and Cilicia, which stand precisely in the same relation to the earlier series of those districts as do those of the Phoenician towns to the satrapal and regal coins which preceded them at Aradus, Tyre, and Sidon.

The first chapter of the Introduction contains a lucid account of the origin of the Persian gold daric and silver siglos. In his remarks on the iconography of the Persian monarchs from Darius I and Xerxes down to the Macedonian conquest, M. Babelon, following in the footsteps of M. Six, endeavours, with more or less success, to distribute the darics and sigli, according to style of portraiture, among the various reigns. In general his classification seems well founded, though we might certainly take exception to his attribution of the daric with a prow on the reverse (No. 124) to Caria. The sole reason for assigning it to Caria is that the object or symbol on the side of the prow, which is probably a bow and arrow, has the appearance of a Carian letter. The place which this so-called letter occupies is, however, far more appropriate to a symbol than a letter

(cf. the prow on the coin of Pharnabazus (Pl. IV., 5) and that on the coins of Cius in Bithynia (B. M. Cat. Pl. XXVIII., 7—12)). Moreover, as no certain Carian characters have as yet been discovered on coins, it seems a little hazardous to suppose that this fourth-century gold stater, evidently struck at some Greek coast town, is exceptional in this respect. In the second chapter of his Introduction, M. Babelon deals with the coins of the tributary dynasts and satraps of the Persian empire. A minute study of these series tends only to confirm the judgment already expressed by M. Waddington and M. F. Lenormant, that the Persian satraps never enjoyed rights of coinage in their capacity of provincial governors. The coins which bear their names were issued by them for military purposes only, during expeditions by land and sea, and therefore not exclusively within the limits of their own provinces.

An exception to this general rule is furnished by the coinage of the hereditary rulers of Caria and Lycia. The coins of Tiribazus, Tissaphernes, Pharnabazus, Datames, Mazaeus, &c., are next discussed, and the author shows, beyond all reasonable doubt, that the coins ascribed by M. Six to an unknown Satrap Tarcamos should be restored to the historically well-known Datames. A large portion of M. Babelon's highly interesting Introduction consists of a re-statement, very welcome in this permanent form, of the views already enunciated by him in various articles in the *Revue Numismatique*. As these articles have already been noticed in the *Chronicle* we need not here discuss them again. We note, however, that he adheres to his attribution of the coins of Sinope reading Abdsasan to the Satrap Abrocomas. In this opinion we regret that we are unable to agree with him.

In the rich series of early Lycian coins there are several unpublished specimens with names of hitherto unknown dynasts, e.g. Uteves and Khadritimes. M. Babelon follows for the most part M. Six's attributions and dates, though he transliterates some of the Lycian characters in a different manner, e.g. *Ekuvēmi* for *Okuvomi*, *Tēnegure* for *Tunevore*, &c. The classification of this obscure series is still, however, almost wholly conjectural. We think that the dates here assigned to some of the Lycian dynasts, Spintaza and Tethiveibis for example, are much too late. The style of the staters bearing these names points to the early part of the fifth century rather than to B.C. 410. The section which deals with the coinage of Cyprus is an able *résumé* of all that is at present known on the subject. The writer differs, and we think with good reason, from M. Six, in ascribing to the reign of Evelthon himself (569—

525 B.C.) all the coins which bear his name, whether in the nominative or the genitive case, while M. Six would attribute those reading Εὐφέλθοντος to his descendants and successors. Among the coins of Evagoras II, 368—351 B.C., M. Babelon proposes to class the Satrapal staters with the King of Persia, Artaxerxes Ochus, as a kneeling archer on the obverse, and on a galloping horse on the reverse, accompanied by the Phœnician letters O or OO (y y) the Phœnician equivalent of the Greek EYA. The correct explanation of these hitherto enigmatic characters is one of M. Babelon's most brilliant discoveries. Whether the staters bearing these letters were actually struck in Cyprns, as the author thinks, is, however, very doubtful. Judging by their style, we are inclined to prefer the attribution of this series to Caria. Next in order follow the coins of the great commercial ports of the Phœnician coast, Aradus, and Marathus, Berytus, Byblus, Sidon, Tyre, and many others. This portion of the Catalogue is more complete than any other, though the Phœnician issues of the gold staters and silver tetradrachms of the Alexandrine, Ptolemaic, and Selencid regal types are not included.

This excellent catalogue is accompanied by ample indexes of the Aramaic, Phœnician, Lycian, Cypriote, Greek, and Latin inscriptions occurring on the coins, as well as by a general index, table of contents, and 88 photographic plates, some of which are unfortunately not so well executed as we could have desired. The arrangement of the coins on the Plates which illustrate the Lycian section is also somewhat defective, as it differs from the classification adopted in the descriptive text; but notwithstanding these, and other comparatively unimportant imperfections, the learned keeper of the *Cabinet des Médailles* deserves the highest praise for all the labour and research which he has bestowed upon this splendid volume. The publishers are Messrs. Rollin and Fenardent.

BARCLAY V. HEAD.

The Currencies of the Hindu States of Rajputana, by William Wilfrid Webb, M.B., Surgeon-Captain (Indian Medical Service). Illustrated by a Map and twelve plates of coins. (Constable & Co. 1893.)

The modern local coinages of India have always been a stumbling-block to numismatists. Owing to a variety of causes

their classification is unusually difficult. They very frequently retain the inscriptions of the later Moghul emperors, and mark their own individuality solely by the addition of some symbol or letter. Even when they bear inscriptions of their own, the workmanship of the coins is so bad that only small portions can be read on any one specimen. The attempt to arrange these series from a study of the coins only is, therefore, hopeless. We must to a very great extent be dependent on such information as can be gained from the natives themselves—the mint authorities, the bankers, and others. The native authorities are, perhaps not unnaturally, jealous of all such enquiry, and it speaks volumes for Surgeon-Captain Webb's tact and patience that he has been able to obtain so much information at first hand. In publishing the results of his investigations, Surgeon-Captain Webb has given us help for which we cannot be too thankful. It is to be hoped that his good example will be followed by residents in other provinces of India.

The present work gives a convenient résumé of the history of each State of Rājputāna, a description with illustrations of all its known coins, and a list of its princes down to the present time—thus supplementing the dynastic lists in Prinsep's *Useful Tables*. Much of the information here given in a compact form would be sought for in vain elsewhere.

It is necessary, however, to point out that some of the statements made by the mint authorities will require careful examination. The records of the mints are seldom satisfactory, and considerable confusion exists between currencies actually issued by a state, and currencies recognised by the bankers and traders of that state. To what extent such a confusion may mislead the enquirer may be imagined. The state of the currency—particularly of the copper currency—in some native states is such that almost any round or square piece of metal of appropriate size may get into circulation. It is a fact that in a single bazaar there may still be found copper coins of every period from the second century B.C., down to the present day, mingled occasionally with specimens of the British card-counter or regimental button—all passing current as pice.

An instance of the confusion above-mentioned may be given from Surgeon-Captain Webb's chapter on the coinage of Shāhpura. We find here a gold mohur of Shāh 'Ālam, struck at Shāhjahānābād, attributed to Shāhpura, without any reason whatever, except, no doubt, the fact that the coin was in circulation there.

On Plate I. Fig. 7, is represented a late Indo-Scythic copper coin dating from about the fourth century A.D. The types are

borrowed from the coinage of Vāsudeva—Obv.: The King standing; Rev.: Civa and his Bull. The work is extremely barbarous, so much so that Surgeon-Captain Webb has turned the obverse upside down and has recognised in the inverted figure of the king the representation of a fire-altar! It should be noticed, however, that the attribution of the coin is settled by the type of the reverse, which is Indo-Scythic and anterior to any Indian coinage bearing the Sassanian fire-altar. Misled in this instance, Surgeon-Captain Webb goes a step farther and sees this fire-altar in the design which occurs on Fig. 8. This coin is quite modern, and the design is surely nothing more than a trisul and the final س of جلوس which so often occurs in a similar position (compare Fig. 22 of the same Plate).

Inaccuracies of this kind can only be avoided by a systematic study of the whole history of Indian coinage. It is too much to expect that the ordinary hard-working Indian official can spare the time for such a study. It is greatly to Surgeon-Captain Webb's credit that he has employed his leisure while in India in investigations which have enabled him to produce a work indispensable to all collectors and students of the coinages of native Indian states.

E. J. RAPSON.

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END OF VOL. XIII.

PROCEEDINGS OF THE NUMISMATIC SOCIETY.

SESSION 1892—1893.

OCTOBER 20, 1892.

SIR JOHN EVANS, K.C.B., D.C.L., LL.D., Sc.D., Treas.R.S.,
V.P.S.A., F.G.S., President, in the Chair.

Messrs. William C. Boyd and Edwin Hill Evans were elected
Members of the Society.

The following presents were announced and laid upon the
table:—

1. The Origin of Metallic Currency and Weight Standards.
By Professor W. Ridgeway. From the Author.
2. Catalogue of Greek Coins in the British Museum, "Alex-
andria." By R. S. Poole. From the Trustees of the British
Museum.
3. Catalogue of Greek Coins in the British Museum, "Ionia."
By B. V. Head. From the Trustees of the British Museum.
4. Catalogue of Oriental Coins in the British Museum, "Addi-
tions to Vols. v—viii." By S. L. Poole. From the Trustees of
the British Museum.
5. Aarbøger for Nordisk Oldkyndighed og Historie. Band
VI, Heft IV, and Band VII, Hefte I—II. From the Society
of Northern Antiquaries of Copenhagen.
6. Journal of the Institute of Bankers. Vol. xiii. Parts
VI—VII. From the Institute.

7. *Annales de la Société d'Archéologie de Bruxelles.* Tome vi., Livr. I. From the Society.
8. *Smithsonian Institute. Report 1890.* From the Institute.
9. *Berliner Philologische Wochenschrift.* Nos. 21—42. From the Publishers.
10. *Proceedings of the Society of Antiquaries.* Vol. xiv. No. 1. From the Society.
11. *Bulletin de Numismatique.* May—September, 1892. From the Editor, M. R. Serrure.
12. *Bulletin historique de la Société des Antiquaires de la Morinie.* Livr. 161, 162. From the Society.
13. *Journal of the Society of Antiquaries of Ireland.* Vol. ii. Parts II—III. From the Society.
14. *Études de Numismatique.* Tome i. By J. A. Blanchet. From the Author.
15. *Zeitschrift für Numismatik.* Band XVIII. Heft II. From the Editor.
16. *Revue Belge de Numismatique, 1892.* Livr. 8, 4. From the Belgian Numismatic Society.
17. *The Medals of Natural Scientists.* By Dr. H. R. Storer. From the Author.
18. *Proceedings of the Royal Irish Academy.* Vol. ii. No. 2. From the Academy.
19. *Rivista Italiana di Numismatica, 1892.* Parts II—III. From the Editor.
20. *Archæologia Cantiana.* Vol. xix. From the Kent Archæological Society.
21. *Colección de Leyes, Decretos y otros Documentos sobre condecoraciones militares, medallas, moneda, &c., de América del Sud.* By A. Rosa. From the Author.
22. *Monetario Americano.* By A. Rosa. From the Author.
23. *Numismatische Zeitschrift.* Band XXII, 1890. From the Numismatic Society of Vienna.
24. *Annuaire de la Société Française de Numismatique.* May—August, 1892. From the Society.

25. *Monatsblatt der Numismatischen Gesellschaft in Wien.* Nos. 107—111. From the Society.
26. *Jahrbücher des Vereins von Alterthums-freunden im Rheinlande.* Heft XCII. From the Society.
27. *Archæologia Æliana.* Vol. xv. Part III. From the Society of Antiquaries of Newcastle-upon-Tyne.
28. *Kongl. Vitterhets Historie og Antiquitets Akademiens Månadsblad,* 1890. From the Swedish Academy.
29. *Sitzungsberichte der Königlichen preussischen Akademie der Wissenschaften zu Berlin.* Nos. 1—25, 1892. From the Academy.
30. *Foreningen til norske Fortids Mindesmerkers Bevaring, Aarsberetning,* 1890. From the Norwegian Society of Antiquaries, Christiania.
31. *Hovedo Kloster og dets Ruiner.* By N. Nicolaysen. From the Author.
32. *Kunst og Handverk fra Norges Fortid.* Part II. From the Norwegian Society of Antiquaries.
33. *Mémoires de la Société royale des Antiquaires du Nord,* 1891. From the Royal Society of Northern Antiquaries, Copenhagen.
34. *Coins and Medals, their place in History and Art.* 2nd. edit. From the Publisher, Mr. Elliot Stock.
35. *Mémoires de la Société des Antiquaires de la Morinie.* Tomo xxii. From the Society.
36. *Proceedings of the Numismatic and Antiquarian Society of Philadelphia,* 1890—91. From the Society.
37. *Bulletin de la Société des Antiquaires de Picardie.* Nos. 2—4, 1891, and No. 1, 1892. From the Society.
38. *Münzen und Medaillen-Cabinet des Justizraths Reimann in Hanover.* Parts I—III, 1892. Frankfurt, 1892. From H. Montagu, Esq. F.S.A.
Mr. H. Montagu exhibited a halfpenny of Alfred the Great with the usual London monogram, and bearing the king's bust and *ÆLFRED RE* on the obverse: it was found in the Thames

at Eriih, and is the second example known; also an unpublished penny of Edward the Confessor, reading *ÆLFINE ON LVNDEN*; this coin is a so-called "mule," consisting of an obverse similar to "Hawkins" No. 228, and of a reverse similar to No. 227. Mr. Montagu also exhibited a very fine aurens of Geta of the type of Cohen No. 11, and described by that author from the Caylus specimen, the obverse legend being *P. SEPT. GETA. CAES. PONT.* and that of the reverse *CASTOR*; type, Castor standing beside his horse. From the absence of the pileus and the resemblance of the features to those of the emperor, Mr. Montagu was led to suggest that the figure may have been intended for the young emperor in the character of Castor.

Mr. L. A. Lawrence read a paper describing a "find" of groats of Edward IV, Henry VII, and Henry VIII. From an examination of these coins, and from the evidence of other finds covering the same period, Mr. Lawrence placed the mint-marks of the coins of the arched crown series of Henry VII in the following sequence: 1. Heraldic cinquefoil; 2. Escallop; 3. Irregular cinquefoil; 4. True cinquefoil; 5. Leopard's head; 6. Lis issuing from half rose; 7. Anchor; 8. Greyhound; 9. Cross-crosslet. This paper is printed in vol. xii. p. 278.

Mr. W. E. Marsh communicated a paper on the device of the three pellets in the angles of the cross as first introduced on the reverses of the coins of Henry III, in A.D. 1248. The writer thought that these pellets were not merely ornaments, but were intended to represent "bezants," a part of the armorial bearings of Richard, Earl of Cornwall, to whom his brother Henry III had granted in 1247 the privilege of making the new money in the king's name.

NOVEMBER 17, 1892.

SIR JOHN EVANS, K.C.B., D.C.L., President, in the Chair.

Lady Evans, F. A. Inderwick, Esq., Q.C., Major Adam Smith, Vincent A. Smith, Esq., Professor Bunnell Lewis, Dr. W. Vost,

and the Hon. Kathleen Ward were elected Members of the Society.

The following presents were announced and laid upon the table :

1. *Journal of the Institute of Bankers.* Vol. xiii, Part VIII. From the Institute.

2. *Berliner Philologische Wochenschrift*, Nos. 43—46, 1892. From the Publisher.

3. *Sitzungsberichte der Königlichen preussischen Akademie der Wissenschaften.* No. 26—40. From the Academy.

4. Bronze Medal commemorating the visit of the German Emperor to the City of London, July, 1890. From the Corporation of the City of London.

Mr. H. Montagu exhibited a tetradrachm of Ægæ in Æolis, similar to Head, *Hist. Num.*, p. 478, of which only one or two other specimens are known ; also the pattern shilling of Queen Anne of 1710, of which no current example was coined, and proofs of the shilling and sixpence of 1707 struck at Edinburgh, as well as a proof of the ordinary sixpence of 1707.

Mr. J. M. C. Johnston exhibited specimens of gold and silver bar money struck at Mozambique in the early part of the present century, and still legal tender there. These rare and curious pieces weigh respectively 222 and 896 grains, and bear marks of value and countermarks as guarantees of genuineness. They were received at the Bank of Mozambique from the highlands on the Upper Zambesi together with some gold coins of Abaga, one of the Mongols of Persia, who reigned at Baghdad, A.D. 1265—1281. Mr. Johnston was of opinion that these Persian coins found their way into South-East Africa from India.

Mr. A. E. Packe read a paper "On the Types and Legends of the Medieval and Later Coins of England." See vol. xii, p. 257.

DECEMBER 15, 1892.

SIR JOHN EVANS, K.C.B., D.C.L., President, in the Chair.

Richard Hewitt, Esq., was elected a Member of the Society.

The following presents were announced and laid upon the table :—

1. Berliner Philologische Wochenschrift. Nos. 47—50, 1892.
From the Publisher.

2. Bulletin de Numismatique. Nov. 1892. From the Editor,
M. R. Serruro.

3. Jahrbücher des Vereins von Alterthums-freunden im Rhein-
lande. Heft XCIII. From the Society.

4. Journal of the Institute of Bankers. Vol. xiii, Part IX.
From the Institute.

The President exhibited the original die, from the Chapel of the Pyx, of a penny of Edward III or Richard II, very much worn by use ; Mr. A. E. Copp, a shilling of Charles I struck in gold, and a five-shilling piece of the Commonwealth, 1651 ; Mr. Mackerell, a largo brass coin of Hadrian in very fine condition, having on the reverse a dekastyle temple with the letters S.C., in the field and repeated in the exergue.

Mr. W. C. Boyd exhibited a plated denarius of Augustus, rev. DVRMIVS III. VIR., Victory with wreath and palm ; also a base denarius of Julia Maesa, Rev. FIDES MILITVM, figure seated, holding globe.

Mr. L. A. Lawrence exhibited a penny of Edward II, interesting as showing a combination between a Durham obverse (that of Bishop Beaumont) and a London reverse, proving that the Durham dies were engraved in London.

Dr. F. P. Weber exhibited a lead medal of Paracelsus bearing the inscription THEOPHRASTVS PARACELSVS . A°1541, and a full-face figure clad in an ample gown and holding in his hands an object supposed to be the handle of the famous two-

handed sword which it is recorded Paracelsus used to keep by his side when sleeping. See vol. xiii, p. 60.

Mr. F. B. Baker read a paper on some rare Greek coins obtained by Mr. Loring during his recent travels in Arcadia. Among them were the following: Parium, Commodus, *rev.* a standing figure of Eros, copied from the once famous Eros of Praxiteles; Megalopolis, Severus, *rev.* ΛΥΚΕΑ or ΛΥΚΑΙΑ, recording the celebration of the Lycaean games, the origin of which is ascribed by Pausanias to Lycaon, the King of Arcadia, who introduced the worship of the Lycaean Zeus. See vol. xiii, p. 21.

Dr. B. V. Head, in the course of some remarks upon Mr. Baker's paper, said that on the coin of Parium exhibited by him the figure of Eros appeared to hold in one hand a flower, and that, if so, this would tend to confirm the theory of the late Dr. Stark, that the epigram of Palladas in the Greek anthology, in which a statue of Eros is described as holding in his two hands δελφῖνα καὶ ἄνθος, may have been after all an accurate description of the Eros of Parium by Praxiteles.

Mr. Montagu read a paper on a find of coins at Fischenich, near Cologne, with observations on Flemish imitations of English nobles, some of which were included in the hoard. The writer, who exhibited a considerable number of these imitations, was of opinion that they were not struck by authority of the kings of England, but by private enterprise in the interest of commercial transactions between England and Flanders. The paper is printed in vol. xiii, p. 26.

JANUARY 19, 1893.

SIR JOHN EVANS, K.C.B., D.C.L., President, in the Chair.

Lieut.-Col. H. Leslie-Ellis, Robert Arnot, Esq., J. H. Gooch-Jolley, Esq., and A. W. Hankin, Esq., were elected Members of the Society.

The following presents were announced and laid upon the table:—

1. Catalogue of the Coins of the Moghul Emperors of Hindustan in the British Museum. By S. Lane-Poole. From the Trustees of the British Museum.

2. Rivista Italiana di Numismatica. Fasc. IV, 1892. From the Editors.

3. Atlas der Nederlandsche Penningen. By Jacob Dirks. From the Directors of the *Fondation de P. Teyler*, at Harlem.

4. Numismatische Zeitschrift. December, 1892. From the Numismatic Society of Vienna.

5. Berliner Philologische Wochenschrift. Nos. 51—52, 1892, and 1—3, 1893. From the Publisher.

6. Bulletin de la Société des Antiquaires de l'Ouest. 3^{me} trimestre, 1892. From the Society.

7. The Canadian Antiquarian. Parts I—IV, 1892. From the Editor.

8. Journal of the Royal Society of Antiquaries of Ireland. Vol. ii, Part IV. From the Society.

9. Annuaire de Numismatique, 1^{re} livraison, 1893. From the French Numismatic Society.

10. Revue Belge de Numismatique, 1^{re} livraison, 1893. From the Belgian Numismatic Society.

11. Monatsblatt der Numismatischen Gesellschaft in Wien. November—December, 1892. From the Numismatic Society of Vienna.

12. Journal of the Institute of Bankers. Vol. xiv, Part I. From the Institute.

Mr. H. Montagu exhibited two rare gold coins, in fine condition, of the Empress Galeria Valeria, wife of Galerius Maximianus, *reverse*, VENERI VICTRICI—one struck at Nicomedia, the other at Siscia.

Mr. Packe read a paper on the coinage of the Norman kings of England, in which he contended that the various types of the coins were not all issued one after the other successively

in point of time, but that some were contemporary with others ; and he also argued that the dies for each type must have been made at some one centro, or by one engraver and his assistants, and that these were not the same in the case of all the types, some of which were evidently copies of others. The paper will be found in vol. xiii, p. 129.

FEBRUARY 16, 1893.

SIR JOHN EVANS, K.C.B., D.C.L., President, in the Chair.

Monsieur Charles Farcinet was elected a Member of the Society, and MM. F. Gnechi, the Vicomte B. de Jonghe, and Herr Arthur Löbbecke were elected Honorary Members.

The following presents were announced and laid upon the table :—

1. General Index to the Proceedings of the Royal Society of Antiquaries of Scotland. Vols. i—xxiv. From the Society.
2. Transactions of the Royal Irish Academy. Vol. xxx, Parts III—IV. From the Academy.
3. Proceedings of the Royal Irish Academy. Vol. ii, No. 3. From the Academy.
4. Annuaire de la Société Française de Numismatique. November—December, 1892. From the Society.
5. Zeitschrift für Numismatik. Band XVIII, Heft III—IV. From the Editor.
6. Bulletin de Numismatique. 1^{re} livr., 1893. From the Editor, M. R. Serrure.
7. Berliner Philologische Wochenschrift. Nos. 4—7. From the Publishers.
8. Proceedings of the Society of Antiquaries. Vol. xiv, No. 2. From the Society.

The President exhibited a half-crown of the new coinage, 1893, and expressed an opinion that while the reverse was open to

criticism, the bust of Her Majesty on the obverse would meet with general approbation.

Mr. H. Montagu exhibited an aureus of the *Cornelia Gens*, *obv.* head of Jupiter, *rev.* eagle on thunderbolt. This coin is thought to have been struck during the preparations for the war against Mithridates by Cn. Cornelius Lentulus Marcellinus, who was *Quæstor* in 74 B.C., and who, on one of the denarii of the time, styles himself *CVRATOR DENARIIS FLANDIS EX SENATVS CONSVLTO*. If this coin, as M. Babelon supposes, was struck at Rome itself, it is additionally interesting as being the only aureus issued at Rome before the time of Julius Cæsar.

Mr. L. A. Lawrence exhibited three York pennies of Henry VI (light coinage, m.m. key), Richard III (m.m. sun and rose), and Henry VII (m.m. rose).

Mr. Grueber read the portion of Mr. Keary's introduction to vol. ii, of the *Catalogue of Anglo-Saxon Coins in the British Museum*, which relates to the period between the reigns of Egbert and Alfred the Great. In discussing the types of the coins of the West Saxon kings the writer showed their connection with other coinages of the same time in England, and identified most of the barbarous coins bearing the name of Alfred as imitations made by the Vikings during their occupation of various parts of the country. Mr. Keary also contended that the "Dorobernia" type of Egbert had its origin in the well-known monogram of Charlemagne, and that the prototype of the London monogram on Alfred's coins was to be found on a coin of the Viking leader Halfdan, who occupied London in A.D. 874.

MARCH 16, 1893.

H. MONTAGU, Esq., F.S.A., Vice-President, in the Chair.

The Ven. G. C. Hilbers, Prof. A. S. Napier and E. A. Elliott, Esq., were elected Members of the Society.

The following presents were announced and laid upon the table:—

1. *Annuaire de la Société française de Numismatique.* Jan.—Feb., 1891. From the Society.
2. *Berliner Philologische Wochenschrift.* Nos. 8—11, 1893. From the Publisher.
3. *Aarbøger for Nordisk Oldkyndighed og Historie.* Part III, 1892. From the Society of Northern Antiquaries, Copenhagen.
4. *Foreningen til norske Fortidsmindesmerkers Bevaring, Aarsberetning,* 1891. From the Society.
5. *Om Ruinerne paa Selje.* By J. Nicolaysen. From the Author.
6. *Journal of the Institute of Bankers.* Vol. xiv, Parts II and III. From the Institute.
7. *Myntfundet fra Nesbø.* By Gabriel Gustafson, Bergen, 1891. From the Author.

Mr. L. A. Lawrence exhibited a selection of Anglo-Saxon sceattas bearing Runic legends.

Mr. H. F. Amedroz brought for exhibition four silver coins of the Ayyubi dynasty, believed by him to be unpublished. They were struck between A.H. 640 and 650. He also showed an Othmanli gold piece of Selim II, struck at Algiers in A.H. 974.

Lord Grantley exhibited a 100-franc piece, struck at the Paris mint for Albert I, Prince of Monaco, and two coins of President Kruger of the South African Republic.

Mr. Mackerell laid upon the table some patterns for English sovereigns engraved by M. Ch. Wiener about thirty years ago.

Mr. E. J. Rapson read a paper "On the Earliest Currencies of Northern India." He pointed out that Sir. A. Cunningham's recent work, *The Coins of Ancient India*, supplies an amount of new information of great importance for the scientific classification of these coins. They fall naturally into two main divisions—pæ-Greek and post-Greek. The indigenous pæ-Greek coinage must have been firmly established for some considerable time.

Its influence was sufficiently strong to modify the subsequent Greek coinages of the Kabul Valley and Northern India in two important respects—shape and weight-standard. On the other hand, coin-types as distinguished from punch-marks were very probably borrowed from the Greeks. There seems to be no reason for dating any Indian coin bearing a type before Alexander's conquest, though undoubtedly a square coinage of some description did exist before that time. With regard to the earlier post-Greek native coinages, Mr. Rapson showed that the signs of Greek influence in them often enabled us to determine their chronological sequence. Relying to a great extent on arguments derived from this source, he suggested a chronological arrangement of the coinages of Taxila, Mashura, and other native states.

Sir J. Evans communicated a paper on a recent find of coins at Nesbø, in Norway, compiled from a full record of the discovery drawn up by Mr. G. Gustafson, the Keeper of the Archaeological Museum at Bergen. The most remarkable among the coins was a penny of Æthelred II, struck at Derby, having on its obverse the Agnus Dei, and on the reverse the Holy Dove. Of this extremely rare type only about eight specimens are known, all of which (with possibly one exception) were found on the Continent. See vol. xiii, p. 86.

APRIL 20, 1893.

SIR JOHN EVANS, K.C.B., D.C.L., President, in the Chair.

Herbert Virtue, Esq., was elected a Member of the Society.

The following presents were announced and laid upon the table:—

1. Médaille de Jean Césaire. By M. de Munter. From the Author.

2. Observations on the Gupta Coinage. By Vincent A. Smith. From the Author.
3. Eight articles on Mediæval coins. By the Vicomte Baudouin de Jonghe. From the Author.
4. Journal of the Institute of Bankers. Vol. xiv, Part IV. From the Institute.
5. Monatsblatt der Numismatischen Gesellschaft in Wien. Nos. 116—117. From the Society.
6. Rivista Italiana di Numismatica. Fasc. I, 1893. From the Editors.
7. Aarbøger for Nordisk Oldkyndighed og Historie. Part IV, 1892. From the Society of Northern Antiquaries, Copenhagen.
8. Revue Belge de Numismatique. 2^{me} livraison, 1893. From the Belgian Numismatic Society.
9. Bulletin de la Société des Antiquaires de la Morinie. Livraison, 163. From the Society.
10. Bulletins de la Société des Antiquaires de l'Ouest. 4^{me} trimestre, 1892. From the Society.
11. Bulletin de Numismatique. 2^{me} livraison, 1893. From the Editor.
12. Bulletin de la Société des Antiquaires de Picardie, No. 2, 1892. From the Society.
13. Archaeologia Æliana. Vol. xvi, Part I. From the Society of Antiquaries of Newcastle-on-Tyne.
14. Sitzungsberichte der Königlichen preussischen Akademie der Wissenschaften zu Berlin. Nos. 41—52, 1892. From the Academy.
15. Berliner Philologische Wochenschrift. Parts XII—XVI, 1893. From the Publisher.
16. Bulletin de Correspondance Hellénique. Vols. i—xvi. From the École française d'Athènes.
17. Revue Numismatique, 1880—1892. From the Publishers.
18. Hermes of Praxiteles on a coin of Anchialns. By A. N. Schwartz. From the Author.

Mr. Montagu exhibited a selection from his own cabinet of beautifully preserved gold and silver coins bearing the portraits of Ptolemy Philadelphus and Arsinoë II, and on the reverse those of Ptolemy Soter and Berenice I. Among them were a magnificent gold octadrachm of Arsinoë, and a gold tetradrachm of the same queen, probably struck at a considerably later date. The silver coins shown by Mr. Montagu were a decadrachm of Arsinoë and a specimen of the excessively rare tetradrachm, both evidently struck during her lifetime.

Sir J. Evans exhibited seven silver and copper coins of the present Gaikwar of Baroda, bearing his name and titles. One of these, which may be translated "Commander of the Sovereign's Tribe," dates from 1781, when the second member of the Gaikwar family held a military command under the Governor of Gujarât. Another title, "Lord of the Sword," is characteristic of Baroda coins. The obverses of all the silver coins bear the head of the Gaikwar, and those of the copper the word "Sarkâr" ("The Government") over a horse's hoof and a sword.

Sir J. Evans also exhibited an imitation of one of Akbar's square rupees, such as are now often worn in India as charms, and as are used in native society as complimentary presents given on paying or receiving visits.

Lord Grantley exhibited a new variety of a bronze coin of Theodahatus, A.D. 534—536: *obverse*, D. N. THEODAHATVS REX, crowned bust without beard; *reverse*, VICTORIA PRINCIPVM, Victory on prow; also a brass coin of Childebert I, King of Paris, A.D. 511—558, the oldest piece of money of the Merovingian kings, together with gold coins of Childebert II, King of Paris, and of St. Eloi, the famous goldsmith and minister of Dagobert I, who was elected Bishop of Noyon about A.D. 640.

Mr. L. A. Lawrence exhibited a penny of Coenwulf, struck at Canterbury, and a groat of Edward IV, with his crown very much on one side of his head; also a forgery of a silver

coin of Philip and Mary struck on a later coin, probably of Brabant.

Mr. W. Wroth read a paper on the Greek coins acquired by the British Museum in 1892. Among the more remarkable specimens were a silver coin of Dicæa in Macedon with Eubœan types, a fine gold stater of Demetrius Poliorcetes, a tetradrachm of Pharnabazus with a beautiful portrait of that satrap on the obverse, a coin of Abd Sasan (an unknown governor of the town of Sinope in the fourth century B.C.), a Lampsacene stater with the head of Actæon, and a Lycian silver stater of archaic style, bearing the name of Spintaza, supposed by some to have been a Lycian dynast who lived in the earlier half of the fifth century B.C. The paper is printed in vol. xiii, p. 1.

MAY 18, 1893.

SIR JOHN EVANS, K.C.B., D.C.L., President, in the Chair.

John Dudman, Junior, Esq., George Francis Hill, Esq., B.A., Frederick G. Renard, Esq., and J. M. Stobart, Esq., were elected Members.

The following presents were announced and laid upon the table :—

1. History of Currency in the British Colonies. By Robert Chalmers. From the Author.
2. The Medallists of Ireland and their work. By Dr. W. Frazer. From the Author.
3. Recent unrecorded Finds of James II's brass money near Dublin, with notes. By Dr. W. Frazer. From the Author.
4. Transactions of the Royal Irish Academy. From the Academy.
5. Journal of Hellenic Studies. Vol. xiii, Part I. and Supplementary Papers, No. 1. From the Hellenic Society.
6. Smithsonian Institute Report, 1890. From the Institute.

7. Berliner Philelegische Wechenschrift. Nos. 17—20.
From the Publishers.

Dr. B. V. Head exhibited two fine tetradrachms of Philip of Macedon and Alexander the Great, with the heads on the obverses to the left instead of, as is usual, to the right. The coin of Philip bears a head of Zeus of exceptionally fine style and in very high relief. It is a striking example of the post-Phidian conception of the head of the god. Dr. Head also exhibited a fine and at present unique gold stater of Lampsacus, having on the obverse a head bound with a myrtle wreath, and with a small wing at the side of the neck. This remarkable type Dr. Head thought was intended for Eros, in spite of its feminine appearance; and he further suggested that it might have been inspired by the famous statue of that god executed about the middle of the fourth century B.C. by Praxiteles for the city of Parium, near Lampsacus, on the Hellespont. Another coin exhibited by Dr. Head was a drachm of Locri Opuntii, having on the reverse a figure of the lesser Ajax, the Lecrian hero, charging to the left. The peculiarity of this coin consists in the fact that Ajax is viewed from behind; he is armed with a shield and spear, and the point of his adversary's spear is seen penetrating his shield, giving the impression of a single combat which is quite Homeric in conception.

Mr. Montagu exhibited a set of gold and silver coins attributed to the time of Croesus, King of Lydia, consisting of gold staters of both the Babylonian and the Enboic standards, and of a gold hecte of Enboic weight. The silver coins all follow the Babylonian standard, and comprise a hecte weighing twenty-five grains, a denomination not included in Head's *Historia Numorum*, and perhaps unique.

Dr. H. Weber showed a remarkably fine gold stater of Lampsacus, with a head of Hera on the obverse, a type which seems to be unpublished.

Mr. Pinches exhibited the medal struck to commemorate the opening of the Imperial Institute.

Mr. A. Prevost showed a Columbian half-dollar of the United States, and Mr. Durlacher a complete set of the new silver coins from the crown to the penny. Fault was found with the feeble manner in which the lettering "Decus et Tutamen" on the edge of the crown piece has been executed at the Royal Mint.

Canon Greenwell communicated a paper on some rare and interesting Greek coins recently acquired by him. See vol. xiii, p. 81.

JUNE 15, 1893.

ANNUAL GENERAL MEETING.

SIR JOHN EVANS, K.C.B., D.C.L., LL.D., Sc.D., Treas.R.S.,
V.P.S.A., F.G.S., President, in the Chair.

The Minutes of the last Annual General Meeting were read and confirmed.

The Report of the Council was then read to the meeting as follows:—

GENTLEMEN,—The Council again have the honour to lay before you their Annual Report as to the state of the Numismatic Society.

With great regret they have to announce the loss by death of the following four Ordinary Members:—

J. Harris Gibson, Esq.
Carr Stephen, Esq.
Samuel Smith, Esq.
Dr. C. R. Stülpnagel.

And of ten Honorary Members:—

Dr. J. D. Adrian.
 J. Ritter von Bergmann.
 Dr. Alexandre Colson.
 Señor Don Basilio Sebastian Castellanos.
 Cav. Carlo Gonzales.
 M. Aloiss Heiss.
 Herr Pastor J. Leitzmann.
 Señor Don V. Bertran de Lis y Rives.
 Cav. Giulio Minervini.
 Prof. Valleriani.

Also by resignation of three Ordinary Members:—

Ernest Baggallay, Esq.
 A. Durancé George, Esq.
 Capt. C. H. Innes-Hopkins.

On the other hand the Council have much pleasure in recording the election of the following twenty-three Ordinary Members:—

Robert Arnot, Esq.	George Francis Hill, Esq., B.A.
William C. Boyd, Esq.	F. A. Inderwick, Esq., Q.C.
John Dudman, Jun., Esq.	Prof. Bunnell Lewis, M.A., F.S.A.
E. A. Elliott, Esq.	Prof. A. S. Napier, M.A., Ph.D.
Lieut.-Col. H. Leslie-Ellis.	F. G. Renard, Esq.
Edwin Hill Evans, Esq.	Major Adam Smith.
Lady Evans.	Vincent A. Smith, Esq.
M. Charles Farcinet.	J. M. Stobart, Esq.
J. H. Gooch-Jolley, Esq.	Herbert Virtue, Esq.
A. W. Hankin, Esq.	Dr. W. Vost.
Richard Hewitt, Esq.	The Hon. Kathleen Ward.
The Ven. G. C. Hilbers.	

And of the following three Honorary Members:—

Signor Francesco Gnechi.

M. le Vicomte Baudouin de Jonghe.

Herr Arthur Löbbecke.

According to the Report of the Hon. Secretaries the numbers of the Members are as follows:—

	Ordinary.	Honorary.	Total.
June, 1892	256	28	284
Since elected	28	3	26
	279	31	310
Deceased	4	10	14
Resigned	3	—	3
June, 1893	272	21	293

The Council have further to announce that they have unanimously awarded the Medal of the Society to Monsieur W. H. Waddington, Sénateur, Membre de l'Institut, in recognition of the invaluable services which he has rendered to the scientific study of the Greek and Roman coinages of Asia Minor, not only in his articles in the *Revue Numismatique*, but also incidentally in his learned treatises on inscriptions contained in the *Voyage Archéologique en Grèce et en Asie Mineure*.

The Treasurer's Report — which shows a balance of £307 6s. 11d. as compared with £198 17s. 4d. of last year—is as follows:—

Statement of Receipts and Disbursements of the Numismatic Society, from June, 1892, to June, 1893.

Dr. THE NUMISMATIC SOCIETY OF LONDON IN ACCOUNT WITH ALFRED EVELYN COPP, TREASURER. Cr.

	£	s.	d.		£	s.	d.
To Messrs. Virtue & Co., for printing Chronicle,	34	15	6	By Balance from last Statement.	198	17	4
Part I. of 1892 } ditto ditto	42	9	0	Compositions.	31	10	0
Part II. " ditto	27	12	0	Entrance Fees.	26	5	0
Part III. " ditto	46	15	3	Annual Subscriptions.	247	16	0
Part IV. " ditto	19	8	6	Received for "Chronicles."			
The Autotype Company	16	8	9	Mr. B. Quarleb	£60	3	2
ditto ditto	22	9	0	R. Wright Taylor, Esq.	1	8	0
The Royal Asiatic Society, one year's rent due Midsummer, 1893 }	30	0	0	Major-Gen. Sir A. Cunningham, his proportion }	12	19	0
Mr. Parkinson, for Tea, Coffee, &c., to June, 1892 }	6	11	2	of the Autotype Company's Account }			
Mr. Harper, ditto, to December, 1892 }	3	17	9	Half Year's Dividend on £700 £2½ per cent.			
Messrs. G. Waterston & Sons, for a Library Cabinet }	4	12	6	Consols, due 5th October, 1892 (less Property Tax)	9	7	10
Messrs. H. Bowyer & Co., for Bookbinding	5	11	6	ditto ditto ditto due 5th April, 1893 (less ditto)	9	7	10
Messrs. J. Davy & Sons, for Printing	3	6	0	Colonel J. Tobin Bush for foreign postage	0	2	0
Messrs. Walker & Bontall, for Engraving	2	0	0				
Mr. J. Pinches, for ditto	0	4	6				
Mr. F. Anderson, for Drawing 4 Coins and a Medal	1	16	0				
E. J. Rappon, Esq., expences of attending ninth Oriental Congress }	1	0	0				
Fire Premium	0	15	0				
Mr. R. O. Heurson, for Stationery	0	16	1				
Mr. E. Trim, for a new Cash Book	1	15	0				
Messrs. Hachette & Cie, for "Dictionnaire des Antiquités" }	0	3	9				
Secretaries, for Postages, &c.	5	10	0				
Treasurer, for Postages, Receipts, Stationery, &c.	6	0	0				
Collector (Mr. A. W. Hunt), for Commission and Postages }	6	12	0				
Balance at Bankers	307	6	11				
	£697	16	2				
	£697	16	2				

ALFRED E. COPP,
Honorary Treasurer.
RICHARD A. HOBLYN } Auditors.

Compared with the Vouchers, compared as to additions, and found correct,
ALFRED DURLACHER,
RICHARD A. HOBLYN.

16th June, 1893.

After the Report of the Council had been read, the President handed the medal of the Society to the Foreign Secretary (Mr. Wroth), for transmission to M. W. H. Waddington, with the following words :—

Mr. Wroth, I have much pleasure in presenting to you for transmission to M. Waddington, the medal of this Society, which has been awarded to him by the Council in recognition of his distinguished services to Numismatics especially in connection with the coinages of Asia Minor.

We cannot forget that, though for many years His Excellency has been the zealous and efficient Ambassador of the French Republic at the Court of St. James's, he is by lineage and education a thorough Englishman. Born at Paris in 1826, he was educated at Rugby, and was there renowned for his prowess at football, and afterwards while at Trinity College, Cambridge, he rowed in the victorious University boat in 1849. At Cambridge he took first-class honours in classics, and then devoting himself to Archæological studies, he accompanied the French expedition to Greece, Asia Minor, and Syria, where he spent nine months. In 1851, we find published in the *Revue Numismatique*, the first of his series of Papers "Un Voyage en Asie-Mineure au point de vue numismatique," on the completion of which in 1853, the Prix Allier d' Hauteroche was awarded in most flattering terms to the author by the Académie des Inscriptions et Belles Lettres. In 1865, in recognition not only of his numismatic but of his archæological work, M. Waddington was elected a member of the Académie des Inscriptions. If devotion to public affairs could ever justify a scholar in forsaking those pursuits in which he has gained distinction, it would surely be in such a case as his; a member of the National Assembly, President of the *Conseil Général* of a Department, Senator, Minister of Public Instruction, of Foreign Affairs, President of the French Council, Plenipotentiary and Ambassador in turn, he might well have deserted the studies which charmed his younger

days. Numismatics may at times have been in abeyance, but never have they been forgotten ; and of late years, amidst all the pressing cares of the Embassy, every important collection within the United Kingdom has been visited by M. Waddington, and each coin of Asia Minor they contained has been carefully examined. As a result, the most complete Corpus of the coins of Asia Minor arranged on the plan of Mionnet has been prepared by him, and is now only waiting for the press. It is in recognition of this and other labours that this medal has been awarded, and when the new *Numismatique de l'Asie mineure* shall have been published, it will, if possible, be more evident even than at the present moment how richly it has been deserved.

In reply Mr. Wreth said :—

SIR JOHN EVANS,—I have much pleasure in receiving on M. Waddington's behalf the medal that the Council has awarded him. Had M. Waddington's official duties allowed him to be present to-night, he would, I am sure, have felt that the value of this presentation was not a little enhanced by the extremely felicitous way in which you, sir, have spoken both of him personally and of his labours in the field of numismatics and archaeology.

It must be a source of satisfaction to us all that we may still look forward to the appearance of M. Waddington's great work on the ancient numismatics of Asia Minor ; during the years that he has filled the office of Ambassador he has found, as you have reminded us, occasional opportunities for his favourite researches, and has sometimes dedicated an hour to what Milton calls "the quiet and still air of delightful studies." On many of M. Waddington's visits to the British Museum for the purpose of studying the Greek collection, I have had the privilege of some interesting conversations and discussions with him concerning Asiatic coins, more particularly those of the districts which I was myself engaged in cataloguing. I may perhaps be permitted, therefore, to say that what struck me as specially

inspiring and instructive was the singular thoroughness, the unvarying accuracy, and the calm and patient method of all M. Waddington's work.

In bestowing this medal therefore, we are, as a Society, not only recognising in M. Waddington a distinguished coin-collector and a learned writer, but one also who has specially exemplified in numismatic research the value of scientific method.

The following letter from M. Waddington addressed to Dr. Head has since been received.

31, Rue Dumont-d'Urville,
Avenue d'Iéna, Paris,
July 11, 1893.

MY DEAR HEAD,—I duly received a few days ago the medal of the Numismatic Society of London, which was awarded to me in its last meeting. It has given me very great pleasure to see that my labours in the field of numismatical research have been appreciated by so very competent a body as the Numismatic Society of London. I beg you will thank the Society in my name for the honour they have done me, and tell them that I hope soon to deserve their approbation for a work of more interest and importance.

I have been rather unwell of late,¹ owing to the great heat; otherwise I should have acknowledged the medal much sooner.

Believe me,

Yours sincerely,
W. H. WADDINGTON.

The President then delivered the following address:—

Another anniversary of this Society has come round, and with it the necessity of my offering you some kind of review of our work during the past year, and of our present condition and

¹ We have now to mourn his loss. M. Waddington died on January 13, 1894.

prospects. Last year, I had, for the first time for many years, to abstain from congratulating the Society on an increase in the number of its members during the preceding twelve months. The falling off, however, amounted to only three among our ordinary members, and I expressed a hope that such a diminution might not occur in future years, and that we might shortly resume the path of progress. This hope I am happy to say has been fully realised, the increase in our numbers during the past year having been no less than 16, so that we have now reached a total of 272 ordinary members, as against 256 in 1892 and 259 in 1891. Our financial position has also materially improved.

The diminution in the number of our honorary members from 28 to 22, notwithstanding the election of three distinguished foreign numismatists, is not due to any extreme mortality during the year, but to the fact that owing to our not having received any formal announcement of the decease of no less than nine of our honorary members, their names have been retained on our list as if they were still alive, and it is now only in consequence of diligent inquiry in various directions that our loss has been ascertained, though some of these members died many years ago.

The names of Messrs. Adrian, Bergmann, Colson, Castellanos, Gonzales, Aloiss Heiss, Leitzmann, Lis y Rives, Minervini and Valleriani, have all of them to be removed from our register, but it is only with regard to a few of them that it will be necessary for me to say a few words.

The Ritter von Borgmann's decease took place so long ago as 1872, when he had arrived at the mature age of nearly seventy-six years. He was born in November, 1796, and after completing his studies in the University of Vienna and holding a Professorship at Cilli, in Carniola, he became a keeper of the Royal and Imperial Collection of Coins and Antiquities at Vienna, and on Arneth's death in 1853, the Director. This office he held with great distinction until 1871 when he retired,

dying in July of the following year at Graz, in Styria. A list of thirty-two numismatic papers contributed by him to various periodicals is given in the *Numismatische Zeitschrift*, vol. iv., 1872.¹ They mostly relate to mediæval and modern numismatics. One of them on the coins of some of the Carlovingian Emperors struck in Italy was in part translated into French and appeared in the *Revue Numismatique* for 1839. A notice of Mr. Bergmann's work on Austrian medals will be found in the *Numismatic Chronicle*² for 1841.

I am not aware of the exact date of the decease of Dr. Alexander Colson, of Noyon. It will, however, be within the memory of many of our members that in 1880 two papers from his pen were published in the *Chronicle*.³ One of these related to a coin of Tarentum on which it has been supposed that there is a representation of a horse being shod. Dr. Colson, however, showed the improbability of horse-shoes having been in use among the Greeks, and adduced a passage from Xenophon as to the manner in which the hoofs of the horses in his time were hardened. The second paper related to the Roman coins bearing a portrait usually attributed to Livia, an attribution which in some cases he saw reason to doubt. Dr. Colson was also a frequent contributor to the *Revue Numismatique* on the subject both of Roman and French numismatics. The fact that he had made important collections, especially of the coins struck in France, added materially to the practical value of his essays.

Herr Pastor Leitzmann is best known as having been the founder, and for many years the editor, of the *Numismatische Zeitung*, published at Weissensee, in Thuringia. This periodical first appeared in 1834 and continued in existence until 1871. Leitzmann was also the author of an extensive independent work on German numismatics, as well as of a *Bibliotheca numaria* embracing the period from 1800 to 1866. A large

¹ Page 315. ² Vol. iv., 184. ³ Vol. xx., N.S., pp. 15 and 311.

number of the articles in the *Zeitung* were due to his own pen.

The most important work of Minervini was, I believe, his *Saggio di osservazioni numismatiche*, in quarte, published at Naples in 1856.

M. Aloiss Heiss was born in Paris on January 8th, 1820, but the earliest of his separate numismatic essays dates from only 1867. His fame will rest on his exhaustive and important works upon the coinage of Spain, and his unfinished Life and works of the medallists of the Renaissance. On the former subject he produced in 1865 to 1869 the *Descripcion general de las monedas hispano-cristianas*, in three quarto volumes, supplemented in 1870 by his *Description générale des monnaies antiques de l'Espagne*, and in 1872 by a volume on *Les monnaies des rois wisigoths*. These volumes together give perhaps the most complete account of the coinage of the Iberian peninsula that has ever appeared and will always remain as standard works.

Of his *Médailleurs de la Renaissance*, nine Parts in folio have appeared, the first being published in 1881, and nearly all the materials for the tenth and last part were in readiness when the author's labours were brought to a close by death. His contributions to the *Annuaire de Numismatique* and the *Revue Numismatique*, principally relating to medals, were numerous and important, but he never enriched the pages of our *Chronicle*.

Ameng the ordinary members who have been removed from ameng us by death there are none who had taken any important part in our proceedings, though several had been members of the Society for many years. Mr. Samuel Smith was elected into our body so long ago as February, 1865, and though never contributing to the pages of the *Chronicle*, occasionally corresponded with me on numismatic subjects.

Our medal has this year been awarded to one who on numismatic grounds has most thoroughly deserved it, and who in his capacity as the Ambassador of our powerful neighbour France has earned a degree of popularity which will, I trust,

long survive in the shape of a continuance of those friendly relations between his own country and England which he has done so much to foster. M. Waddington, in the comparative leisure that now awaits him, will I hope, soon find time to publish his now *Numismatique de l'Asie mineure*, which by coin lovers is looked for with equal impatience on both sides of the Channel.

In accordance with my usual custom I will now proceed to pass in review the various subjects to which during the last year our attention has been principally directed. But before attempting to analyze any of the various papers, I must for a few moments revert to Dr. Webor's account of some of the coins in his collection, as to which I was able to say but very few words in my last anniversary address. The coins described in this paper are thirty-eight in number, and comprehend so many, remarkable either for rarity or beauty, that it is hard to make a selection from them. Among them, however, may be noticed a tetradrachm of Himera with the Pelops type on the reverse, possibly commemorating the victory in the Olympian Games obtained by Ergoteles of Himera about B.C. 472; some magnificent tetradrachms of Lykkeios and Patraos of Paonia; a remarkable group of archaic coins with horses facing the spectator on the obverse; a coin of Elis with a mourning Nike on the reverse; an unpublished didrachm of the same place with a grand eagle's head on the obverse; an early coin of Gortyna with **ΑΜΣΑΟ ΟΤ ΜΟΝΤΠΟΛ**; a new coin of Phæstus, much like some that have been attributed to Gortyna; two remarkable Euboic didrachms of archaic fabric with a lyre on the obverse, attributed by Dr. Weber to the Island of Delos; and a beautiful hitherto unique coin of Cnidus with a marvellous head of Aphrodite on the obverse, possibly derived from the famous work of Praxiteles. It is hard to believe that such a series of rarities could be selected from a single private collection, and we may well be grateful to the owner for having published them in our journal.

Turning now to the communications of the past twelve

months, I find that Greek numismatics have occupied a fair amount of our attention. In continuation of his former Reports Mr. Wroth has supplied us with notes on the Greek coins acquired by the British Museum in 1892, and among these there are as in previous years many of great value and interest. I may select for special mention an example of the rare stater of Demetrius Poliercetes of Macedon, in finer preservation than that already in the collection,—an early and unpublished tetradrachm of Abdera with a beautiful head of the youthful Hermes on the reverse, and a drachma of Sinope giving the name of a Satrap. This name, which has been variously read by different authorities as Abdemon, Abdammon or Abrocomn, is by this well-preserved specimen shown to be in all probability Abdsasan, as has been pointed out by Dr. Head.⁴ Some extremely rare coins of Lycia must also be mentioned, including a stater of Spintaza, a Dynast of Telmissos, of whom only coins of smaller denominations were previously known. But perhaps the most interesting, though not the rarest of the acquisitions, is an admirable stater of Pharnabazus, Satrap of Dascylion, of which an example, though in poor condition, was already in the national collection. The head on the obverse is a wonderful specimen of metallic art, and there can be but little doubt that though the coin is of so early a date as about B.C. 410, it is an actual portrait of Pharnabazus, and not an idealised representation of a Persian king. The tunny on the reverse seems to connect the issue of the coin with Cyzicus, a place which, as M. Babelon has pointed out, was reconquered from the Athenians by Pharnabazus and the Spartan admiral Mindarus, after which the Satrap distributed large sums of money among the fleet, for which purpose these staters were possibly struck.

Mr. F. Brayne Baker has called our attention to some rare or unpublished Greek coins obtained by Mr. Loring when travel-

⁴ *Numismatic Chronicle*, 1892, p. 253.

ling in Arcadia during the last three years. The more remarkable pieces belong to the Imperial series, and perhaps the most interesting is one struck at Parium under Commodus with **DEO CVPIDINI** and the name of the town on the reverse, the type being a winged Eros copied from the statue by Praxiteles. Another coin struck under Severus at Megalopolis commemorates the Lycean games, which originated at about the same time as the Olympian. Mr. Loring is to be congratulated on having availed himself of those facilities of acquiring coins from the peasants which many travellers, partly from want of skill in numismatics and partly from the dread of being imposed upon, so constantly neglect.

Canon Greenwell at our meeting last month laid before us some more of the treasures of his remarkable collection of early Greek coins. Among those described were several of the electrum staters both of Cyzicus and Lampsacus, some of them presenting new types.

One of the most remarkable of the Cyzicenes exhibits a boar's head holding a tunny in his jaws, while another gives a winged tunny as the type. A singular stater of Lampsacus appears to show the head of Herakles wearing the head-dress of Omphale, and another bears the head of Athena copied from a tetradrachm of Athens, showing that at Lampsacus as well as at Cyzicus the practice prevailed of borrowing the coin-types of other places. Several other coins of extreme rarity close the list and will serve to impress the reader with the choice yet varied character of Canon Greenwell's marvellous collection.

The valuable papers by Sir Alexander Cunningham on the coins of the Kushans or Great Yue-ti, were mentioned in my last address, and the subject of the early coinage of Asia has been still further pursued by Mr. Rapson, who has pointed out that this coinage naturally falls into two main divisions, *præ-Greek* and *post-Greek*. According to his view, the indigenous pre-Greek coinage, though firmly established for a lengthened period and though modifying the post-Greek coinages of the

Kabul valley and of Northern India both in weight and shape, did not exhibit any definite types before the times of Alexander's conquest, though a square coinage existed in India before his day.

Roman numismatics have again occupied an unimportant part in our Proceedings, though we have had a few rare examples exhibited at our meetings, and Dr. Frederick Weber has given us an account of a small hoard of late Roman copper coins found at Cologne. Among them are some of Theodosius and Flaccilla not mentioned by Cohen, and a rare coin of Eudocia, wife of Arcadius.

In English numismatics we have I think been more than usually busy, as has also been the department of Coins and Medals at the British Museum. The second volume of the *Catalogue of the Anglo-Saxon Series* in the national collection is now in a forward condition and deals with the period between the reign of Egbert and the Norman Conquest. A portion of Mr. Keary's introduction to the volume has been laid before the Society by Mr. Grueber.

Mr. Lawrence has entered into the vexed question of the authenticity of the coins attributed to Aethelbald, only three of which are at present known to be in existence, though another has been figured. These three are, curiously enough, struck from the same dies, but what is more remarkable still, there seems to be a coin of Aethelbald's father Aethelwulf, struck from the same dies, the four letters BALD having been altered on that of the obverse into VVLF. This alteration must either have been made in old times by the moneymaster Terhtulf or in modern times by an accomplished forger, and in either case the alteration is puzzling. If it was made in old times, it is I think unparalleled, as I am not acquainted with any similar alteration of a die of the Saxon period, though of course many coins in Tudor and Stuart times were struck from altered dies. There is, however, the strange circumstance that it is a die of a son altered to suit a father, and not that of a father modified to

suit a son. On the other hand, if the dies were forged, it is passing strange that the forger having produced a satisfactory die for a hitherto unknown coin of Aethelbald, should have altered it so that it would strike the better known and comparatively common coins of Aethelwulf. There remains the possibility of there having been two separate dies for the coins notwithstanding their extreme similarity, and this possibility may seem supported by the fact that in the autotype Plate at all events there is a slight difference in their size. If however a hard steel die were properly annealed, in part re-punched and then rehardened, a slight increase in size might be expected. Looking at some of the marvellous forgeries of Greek coins which have been produced from dies prepared from casts by some process hitherto kept secret, I am inclined to reserve my opinion on the authenticity of these pennies of Aethelbald.

The only other paper that we have had on the subject of Saxon coins is an account by Mr. Gustafson, of Bergen, of a find in Norway, of which I gave a short abstract. The most remarkable of the coins in the find is one of Aethelred II, struck at Derby, with the type of the Holy Lamb and Dove. This type is of extreme rarity; so much so, that Mr. Hawkins regarded the late Mr. Lindsay's specimen as unique. Hildebrand, however, cites seven examples of the type. It is remarkable that all, including Mr. Lindsay's coin, seem to have been found in Scandinavia and not in England. A duplicate of Mr. Lindsay's coin, which is in the Stockholm collection, has been mounted with a ring so as to be worn as a charm or ornament.

Mr. Packe has attempted the difficult task of making some trustworthy arrangement of the various types of coins issued by our Norman kings, and has thrown out some suggestions which are well worthy of consideration. In adopting the view that many of the dies for the moneymen were probably engraved at some common centre, he suggests that more than one such centre may have existed, and that dies were engraved not only in London but also in some of the principal provincial towns,

such as Winchester, Canterbury, York, and Lincoln. He is also of opinion that more than one type of coin may have been issued from any mint at any given time, and makes a careful analysis of all the types of William I, and II, as well as of Henry I, dividing them into two classes—these for which the dies were engraved in Londen, and these for which the dies were produced in other towns. His idea appears to be, that the superior engraving of the dies for some types proves them to have been of Londen workmanship, while those of inferior work were the production of country engravers. Within certain limits this view may be correct. It must, however, be borne in mind, that for some of the types the whole of the dies were engraved in a very low style of art—as, for instance, Mr. Hawkins' No. 250—and that among the coins of these types those from the London mint are normally abundant. Now, we can hardly accept the view that, with skilful engravers at the Londen mint, the moneymasters were compelled to use the barbarously-cut provincial dies while their own engravers remained idle; or, on the other hand, if we suppose that the well-executed coins were being simultaneously issued with the barbarous, how is it that they do not occur together in equal proportions in hoards? We cannot forget, also, that we have some knowledge as to which are the earliest and which the latest coins of the Williams, and that while Hawkins' Nos. 283 to 286 are undoubtedly among the earliest of the coins of the Conqueror, Nos. 246 to 250 are among the latest of Rufus, No. 250 having been found at Shillington, associated in considerable numbers with coins of Henry I. Not only has there been a great falling-off in the workmanship between Nos. 233 and 250, but there has been a considerable increase in the diameter of the coins. The question of the succession of the types does not appear to me in any way insoluble. If some one or more members of the Society would take the subject in hand, and having made a list of the different mints at which coins of Harold II, the Williams, and Henry I, were struck, would then add the names of the moneymasters

of the different types, some sort of chronological arrangement would soon become apparent. The method adopted for ascertaining the sequence of the short-cross series is equally applicable here, and the national and private collections—to say nothing of the sale catalogues of the last forty years—would furnish ample material. The Beaworth and Tamworth hoards would in themselves supply a good nucleus on which to commence, and with a little zeal and a great expenditure of time, a satisfactory solution of this vexed question would be obtained. I cannot but regret that, so far as I am myself concerned, my occupations are too numerous for me to undertake the task.

In another paper Mr. Packe has dealt with an interesting question which had already been touched upon by the late Mr. Bergne—“The Types and Legends of the Mediæval and Later Coins of England.” It is, however, the first time that the subject has been dealt with in so complete and exhaustive a manner. Though most of the early legends have been traced to their original sources in the Bible, Liturgies, or Hymns, the legends after 1600 are, as a rule, left untraced. Many, no doubt, are original, but some of those on the coins of the Stuart period may still be quotations as yet unrecognised.

Mr. Lawrence has favoured us with two papers, one of them “On a Hoard of Groats from the time of Edward IV to that of Henry VIII,” which has enabled him to make some further suggestions as to the sequence of the different mint-marks, and the date of the issue of some of the coins of Henry VII. In the other paper, “On the Silver Coins of Edward III,” he describes some groats, struck probably at the end of his reign, on which the Irish title is missing. He next discusses the question of the attribution of the pennies of peculiar fabric and lettering to Edward III, and shows that, in addition to London, York, and Durham, such coins were struck both at Reading and Canterbury, and that no Reading coins of Edward I can really be said to exist. With regard to the Durham coins of this character, he is inclined to assign them to Bishop de Bury,

thus agreeing with me as to this bishop having struck coins, but differing as to the particular coins which should be assigned to him. It is not for me to say that Mr. Lawrence is not right in his conclusions.

Mr. Montagu, in a paper "On a Find of Coins at Fischenich, near Cologne," has published specimens of a series of noblos and rials, struck in the Low Countries in imitation of coins of Henry VI and Edward IV. These are of coarse workmanship, and though always somewhat under the proper weight appear to make up for it by being of larger diameter than the genuine coins. Though the existence of these coarsely-engraved coins had long been known to collectors, this is, I believe, the first time that they have been properly described and illustrated. Mr. Montagu has added some angels purporting to be of Henry VII and VIII, which seem to come under the same category. In fact, these gold coins are, in another form, a survival of the "counterfeit sterlings" which were struck in such abundance in the Low Countries.

Mr. Grueber has kindly given us two instalments of his "Account of English Personal Medals from 1760," which, as usual, contain much valuable and interesting information. A medal of far earlier date, commemorating the death of Paracelsus in 1541, has been published in the *Chronicle*, by Dr. F. P. Weber, who has given some curious particulars as to the history of this remarkable man. He has also called attention to the Jetton with the mysterious legend, *As soone as wee to bee begunne we did beginne to be undone*. This piece has, by Atkins and others, been regarded as an early coin of America, but it would in reality appear to be only a metallic version of one of Withers' emblems—a kind of "memento mori."

Our contributions to Oriental numismatics have been but small, though we have printed a continuation of Mr. S. Lane Poole's "Fasti Arabici," and notices by M. Amedroz and Mr. Johnston of some coins of the Ayyubi dynasty and of Mozambique.

Of the exhibitions of coins and medals which have enlivened our meetings, I need say no more than that they have been fully as numerous and interesting as in any former years, and have frequently led to instructive discussions.

Among English numismatic publications two British Museum Catalogues may be mentioned, one of the *Greek Coins of Ionia*, compiled by our distinguished Secretary, Dr. Head ; the other of the *Coins of Alexandria and the Nomes of Egypt*, being the crowning work at the Museum of Prof. R. Stuart Poole. It is needless to say that both volumes maintain the same standard of excellence for which the series of catalogues has been distinguished. The introduction in each case is an important numismatic essay, which in the Alexandrian volume extends to nearly a hundred pages, and is of special value inasmuch as it enters at some length into the meaning and mythology of the various types.

The retirement of the author of one of these volumes and the appointment of the author of the other to the post of Keeper of the Coins and Medals thus vacated have both taken place within the last year. All the good wishes of this Society for his health and future usefulness will attend the one in his retirement and the other on his appointment.

Dr. Head may be congratulated also on his department having now such convenient apartments in the Museum allotted to it, which will conduce both to greater facilities for arrangement within the department and to the convenience of the public that comes to consult the numismatic treasures that it contains.

On the Oriental side of numismatics the British Museum has added two more volumes to its already extensive series. *The Coins of the Moghul Emperors of Hindustan*, by Mr. Stanley Lane Poole, is a continuation of his previous catalogues of the Indian Coins in the national collection. This volume deals with the coinage of India from the foundation of the Empire by Baber down to its gradual absorption within the rule

of the East India Company. It also includes the issues of the Company which were struck in imitation of the currency of the Moghuls. In dealing with this last portion of the series the author found much difficulty in distinguishing between the originals and the copies. Whether or not he has in all cases been successful in his classification it is difficult to say, but at all events he has made a step forward towards the solution of one of the puzzling questions of Oriental numismatics.

The other volume on Eastern coins issued by the Trustees of the British Museum is the *Catalogue of the Chinese Coins* from the seventh century B.C. to A.D. 621, and is the work of M. Terrien de la Couperie, the well-known Chinese scholar. It gives a description of the most ancient forms of Chinese coins, the Spade money, the Knife money and the early round money. In his preface the author deals with the history of Chinese numismatics, the origin of the peculiar shapes of the coins, their legends, weights, &c. I may add that the merit of this work has been acknowledged by the French Académie des Inscriptions.

In France itself much activity has prevailed. M. Prou's *Catalogue des Monnaies Mérovingiennes de la Bibliothèque Nationale* is a perfect mine of information on that series of coins of which examples are occasionally found on this side of the Channel, and between which and our rare Saxon *trientes* there is a close connection.

This volume together with those of Monsieur Belfort, the third of which was published during the course of the present year, afford the student a most complete insight into the Merovingian coinage. When we look back on the meagre descriptions given by Boncroue and others the great advance which during late years has been made in this branch of numismatics becomes conspicuously apparent.

Another extremely important catalogue is that of the coins of *Les Perses Achéménides, les Satrapes, — Cypre et Phénicie*, by M. Ernest Babelon. On the merit of all M. Babelon's work it

is needless for me to dilate. I may just mention one Italian volume, *Le monete di Venezia*, by Sig. Nicolo Papadopoli, which gives an account of the coinage of the Queen of the Adriatic from the beginning of the ninth century to the days of Cristoforo Moro at the end of the fifteenth. The frequent discovery in England of Venetian coins makes a handbook of this kind valuable even here.

The Imperial Museum of Vienna has followed the example of the British Museum in publishing a catalogue of its coins of Thessaly and Epirus. As this has already been noticed in the *Chronicle*, I need do no more than express our satisfaction at the home of Eckhel renewing its vitality.

The study of coins and of history as illustrated by coins is, I think, making satisfactory progress, not only in this country but throughout the civilised world, and the latest addition to the list of Numismatic Societies is that of the Netherlands, just founded at Amsterdam, which will be cordially welcomed by its elder sisters, including our own Society.

I have, however, detained you already too long and will conclude by expressing a fervent hope that all these Societies may have a long course of usefulness before them, and by thanking this Society and its Council for the kind and cordial manner in which it has supported me during the past year.

A vote of thanks to the President for his address was moved by Prof. P. Gardner, and seconded by Joseph Brown, Esq., Q.C., C.B.

Prof. Percy Gardner and Thomas Bliss, Esq., were appointed to scrutinize the ballot.

The Meeting then proceeded to ballot for the Council and Officers for the ensuing year, when the following gentlemen were elected:—

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OF LONDON.

DECEMBER, 1893.

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